July 1960

The Office

Magazine of Management · Equipment · Methods

BERKSHIRE LIFE'S NEW OFFICES BY DESIGNS FOR BUSINESS, INC. (Page 56)

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The Office
Magazine of Management · Equipment · Methods

JULY, 1960
VOL. 52, No. 1

Visibility Adds New Dimension to Punched Card Records 12
When the updating of magnetic tapes was too slow for their procedure, this office returned to the use of punched cards with a new dimension—visibility. J. E. BROWN & A. F. MCCONIGA

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Within 24 hours of the receipt of a proof of death form, the beneficiary's check is in the mail—unless a claim seems to require special handling.

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Until now, automated procedures were used chiefly by large brokerage firms with a national network of branches. Yet this medium-sized company has successfully automated its clerical work.

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Some Trends in the Hiring of College Graduates 101
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The Office®

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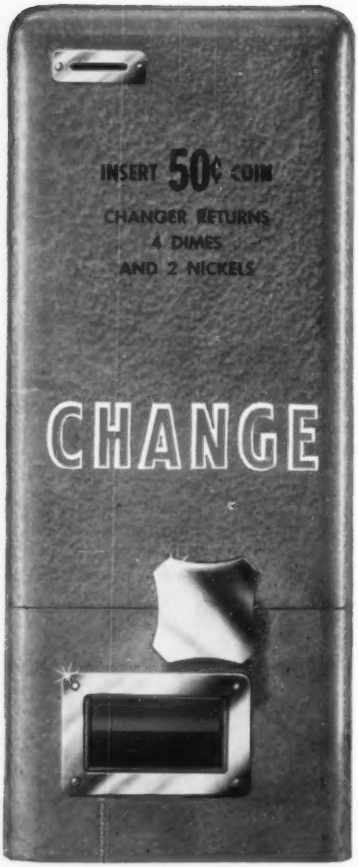

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STANDARD CHANGE-MAKERS

For More Information Circle No. 231

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This index, prepared for your convenience, lists the products and services advertised in this issue. Refer to pages listed for information on each. Further details can be had by writing manufacturer direct, or by use of reader inquiry card.

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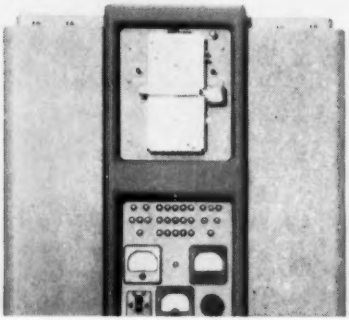
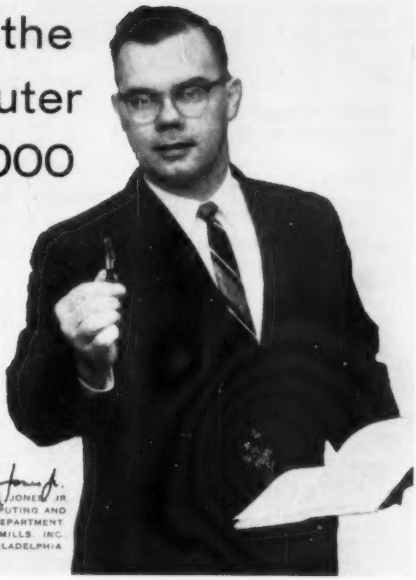
"Our study showed the Bendix G-15 computer will save us $100,000 a year"





WALTER T. JONES JR
MANAGER, COMPUTING AND
ACCOUNTING DEPARTMENT
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PHILADELPHIA

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SPEED Queen's study showed the G-15 is faster than other computers in its price range. *Delivery speed* is excellent, too.

Write for complete details.

Bendix Computer Division

LOS ANGELES 45, CALIFORNIA
DEPARTMENT T-20

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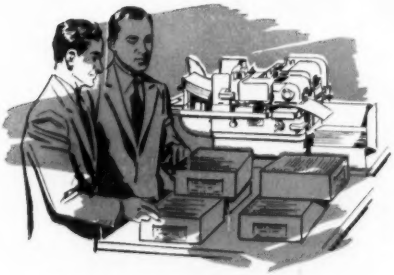
Service organization saves $1296 a year in mailing costs—



How? By calling in a Pitney-Bowes man to look over their mailing procedures. He found that this non-profit organization was sending out 3000 bulletins a month in government stamped envelopes at regular third class postage, 3¢ each. Recommendation: Use commercial envelopes, purchased in quantity, sent at the 1¢ rate for non-profit organizations. Monthly saving: $60 in postage plus $18 saved by using the less expensive commercial envelopes.

And 60,000 envelopes used for first class and other mailings could also be commercially purchased at a saving of $6 per thousand. Total annual saving last year $1296.

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Metered mail can solve many of your mailing problems. A postage meter prints postage as you need it for any kind of mail; stamps and seals the envelope; gives postage protection, automatic accounting. Does away with adhesive stamps and government stamped envelopes, stamp sticking and the stamp box; makes mailing fast and easy, saves time and postage.

There's a meter model for every office, large or small. Call the nearest Pitney-Bowes office to get a free demonstration or a mailing checkup. Or send coupon.

Automatic feed electric model for the larger mailer, stamps and seals up to 150 letters per minute.

PITNEY-BOWES, INC.
3490 Pacific St., Stamford, Conn.

☐ *Want help on mailing problems*

☐ *Send free booklet "29 Timely Mailing Tips."*

*Address*_____

*Name*_____

Pitney-Bowes Postage Meter

Made by the leading manufacturer of mailing machines . . . 139 branch offices.

For More Informaiton Circle No. 238

Visibility Adds New Dimension To Punched Card Records

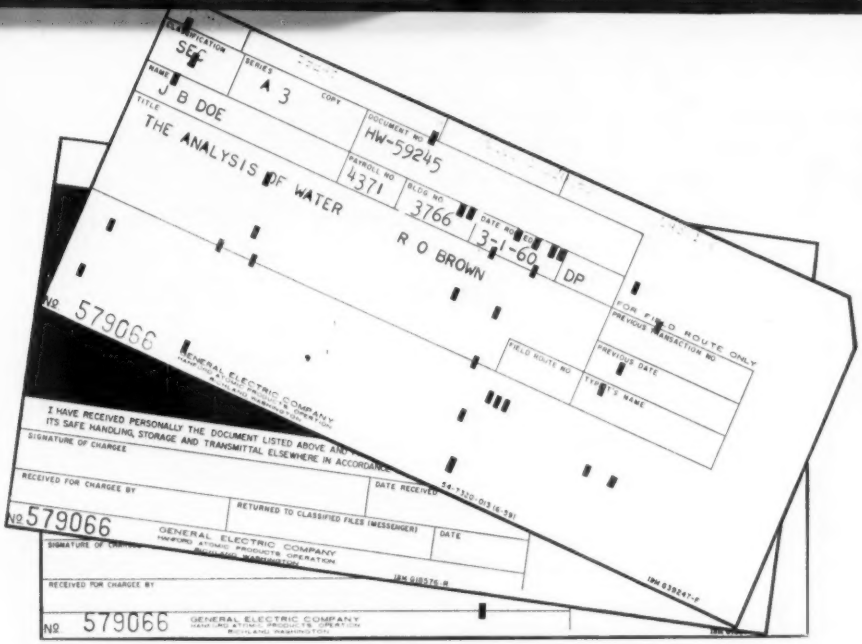
J. E. BROWN and A. F. McCONIGA, Hanford Atomic Products Operation, General Electric Co., Richland, Wash.

THERE IS MUCH breathless news about the benefits of magnetic tape equipment. These pronouncements seem to relegate the use of punched cards to the "dead-duck" realms of the glacially slow, hopelessly incomplete or financially ridiculous. It might be good to pause and consider possible adaptations of punched cards.

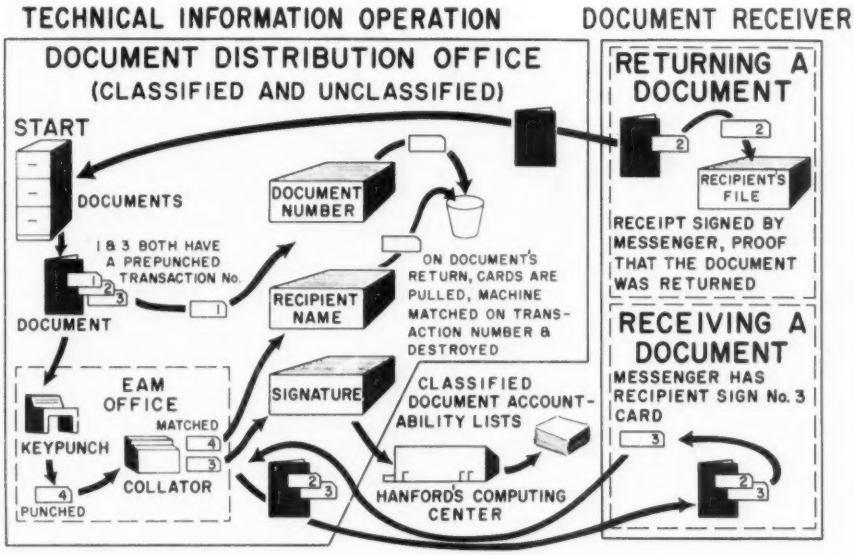
For several years now at the Hanford Atomic Products Operation our technical information center has been seeking an efficient level of data automation for several record keeping functions. After much ebb-and-flow we now feel that our techniques are settling to an automation level ideal for our requirements. At this level you will find a familiar old friend—the punched card, but with new dimensions.

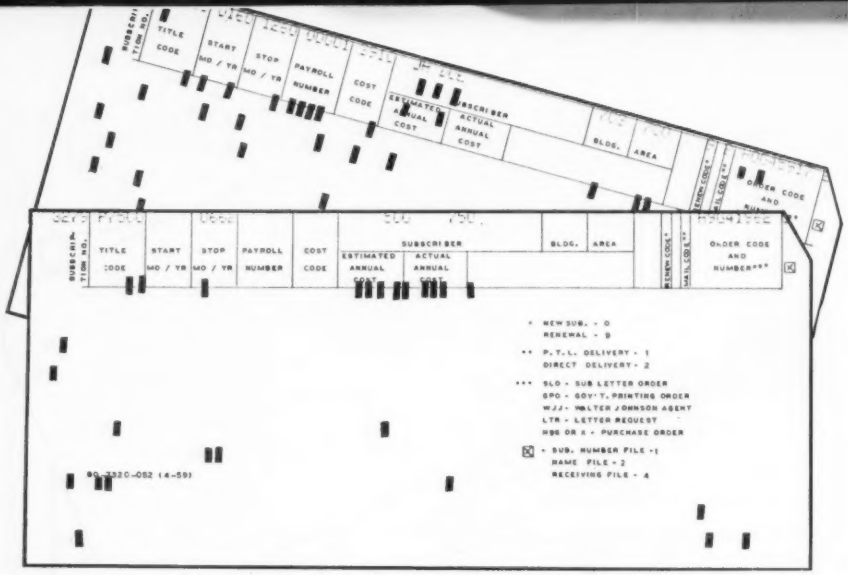
From experience, we suspected that exploitation of the punched card's visual

Routing 100,000 classified and unclassified technical reports annually requires accurate records. Rol-Dex files (at left) house punched cards with visual routing and status information for Hanford's collection of 400,000 reports.

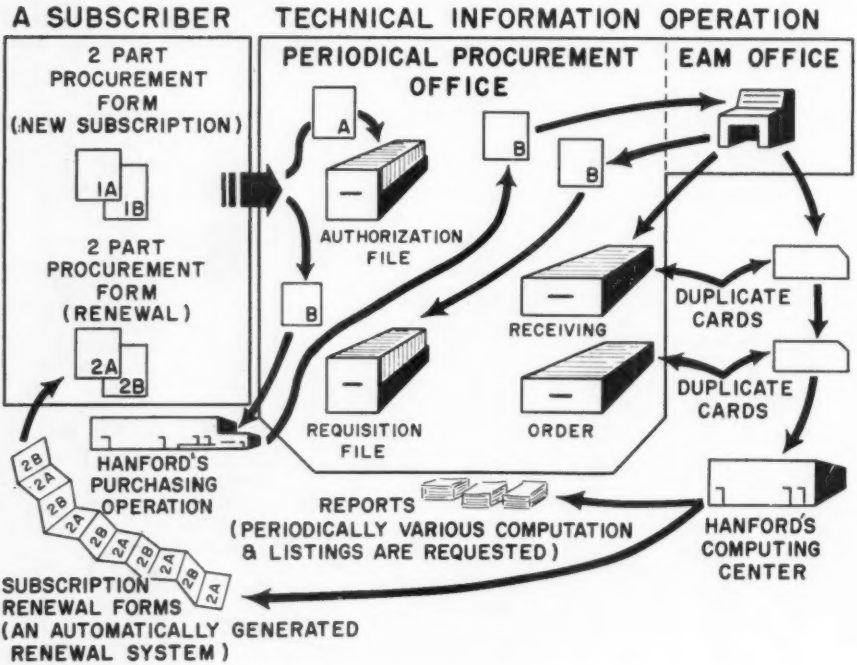


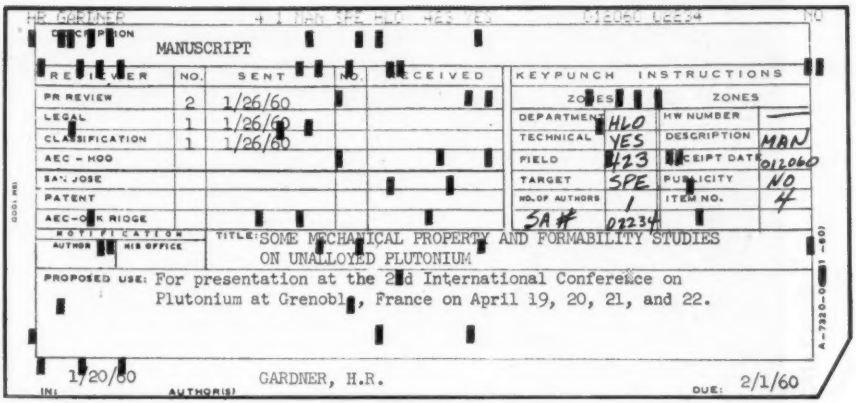
Visual forms on three-part punched card sets control routing of classified and unclassified documents. The limited space on a punched card has brought advantageous uniformity to the visual records. Cards' applications are seen in the simplified flow chart below.





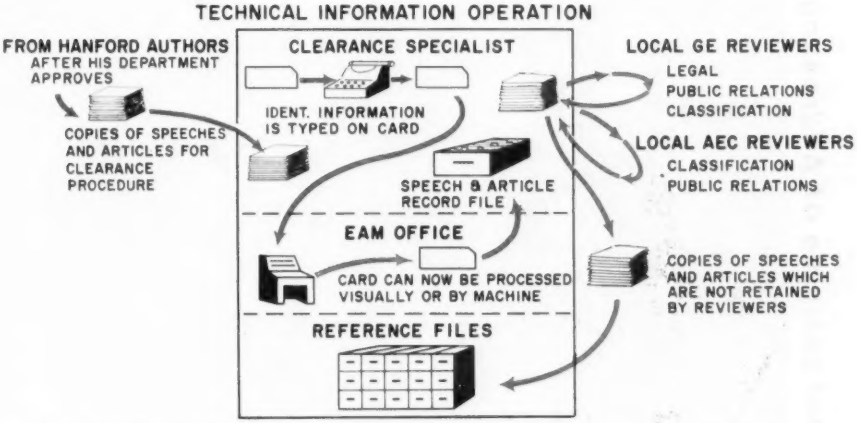
Cards used for periodical procurement. The card in front contains information for cost analysis; the other contains subscriber data. Key for coded visual data is printed on the card to simplify reference. Flow chart for this procedure appears below.





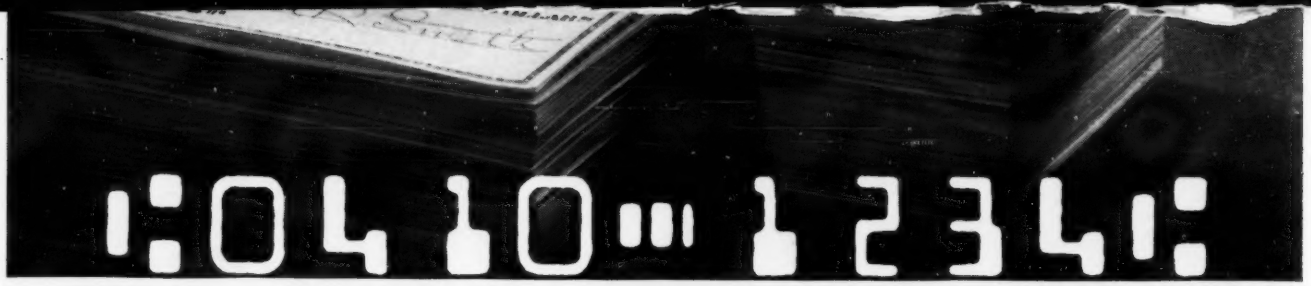
The visual punched card used to record approval of speeches and articles originating at Hanford. Chart of this procedure appears below.

dimension might help solve many problems that seemed to require new and expensive EDP equipment. Much has been written about the shortcomings of card manipulation when compared with data processing on magnetic tape, but little has been said about the advantages of cards designed for visual record purposes while still retaining machine handling qualities. This dual role of cards is now the keystone of our technical information records system. Where immediate referral to records is important for good customer service, visually scanned cards offer distinct advantages. Perhaps illustrations of our particular



A simplified chart of the records flow in the procedure used to clear speeches and articles.

Another example of Addressograph-Multigraph cost-cutting



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adaptations—especially those related to punched cards as visual records—will suggest card techniques useful elsewhere.

Visual usefulness of cards is achieved in two ways. One is very well known, but the other is not. The familiar visual adaptation is "interpreting" which means that information punched in cards is read by a machine and printed across the top of the card. The not so familiar card adaptation is their use in a typewriter as single, multiple copy or continuous forms. A surprising amount of visual information can be put on these card forms.

With increased visual utilization, basic qualities of cards such as their physical make-up begin to display unsuspected virtues. The stiffness and body of a machine card is ideal for repeated manual filing. Even the proportions of the card are ideally suited to a visual file. Being only 3¼″ deep, filed cards can be spread apart and quickly read without card removal. Even the smallness of cards has proved a boon because of its stimulation of coding and standardization.

Our staff of 70 people in the Technical Information Operation functions as part of the AEC's vast Hanford project near Richland, Wash. Hanford's atomic reactors, chemical processing facilities, laboratories and shops are situated in widely separated locations within a restricted government reservation which covers an area almost as large as the state of Rhode Island. As prime contractor for the AEC at Hanford, General Electric Company's work-force here (approximately 8000) operates the huge installation's many facilities.

Responsibilities of the Technical Information Operation include: editing and publishing of technical reports (150 titles annually); operation of a large

This small "satellite" installation in Hanford's Technical Information Operation does the limited amount of on-the-spot machine processing required of their visual punched cards. Periodically the cards are sent to Hanford's data processing center for computing and report generation.

technical reference library (40,000 books) and report collection (400,000 reports); routing of technical reports (100,000 annually), magazines (35,000 annually) and books (21,000 annually) to Hanford's management and technical personnel; classified document accountability; and miscellaneous other information classification and clearance functions.

Our early experience with EDP provided impetus toward visual use of punched machine cards. We first utilized EDP when developing a record keeping system for our combined classified document circulation and inventory responsibilities. The records were handled on tape by an IBM 702 (since replaced by a 709) at Hanford's GE-operated central data processing offices. Accounting and scientific computation are the two main concerns of these offices which are situated about four miles from our work location.

In our initial automation stage, the central data processing offices would receive our circulation and accountability record files daily on 5″ x 8″ forms. They would then up-date our entire 400,000 document records stored on magnetic tape. Daily status reports were prepared from this tape and sent to us. We attempted to satisfy over-the-counter and minute-by-minute telephone requests for information with these reports.

Even under ideal circumstances our tape records were only complete through the preceding day's business since daily updating of the tape was

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For More Information Circle No. 276

done on the swing shift. Circumstances were not always ideal; at times our work was held back while jobs of higher priority were put on the EDP equipment. Other problems arose when it became necessary to use supplemental, shorter tapes created to avoid the time and expense of merging relatively small amounts of information into the master tape. Information retrieval and accuracy became increasingly difficult as the number of supplemental tapes increased. Eventually, day-to-day updating and use of EDP magnetic tape was scuttled because only a file that was being manually up-dated throughout the day's business could meet our requirements. We were hesitant about a complete retreat from automation, so forms on punched cards came to the rescue.

It was only necessary to install an

Hanford receives and routes about 35,000 periodicals a year to the 2200 members of its management and technical staff. Control file for this service employs visual punched cards.

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026 printer punch, verifer, sorter, and collator to realize the handling benefits we had designed into the card forms. Now, when the situation warrants, blocks of information too large for efficient manual handling can be quickly machine sorted, sequenced, merged or matched in our office. Hanford's central data processing no longer processes our information on a daily basis, but they periodically provide listings, computations and self-perpetuating order forms compiled from our machine cards.

It would be beyond the scope of this discussion to describe in detail the evolution of all our records tasks and how we solved each problem by devising forms on machine cards. However, a closer look at the progress of one such evolution should be informative. Card adaptation of records cover-

Visual punched cards, which allow manual up-dating, are replacing the record forms shown in the foreground.

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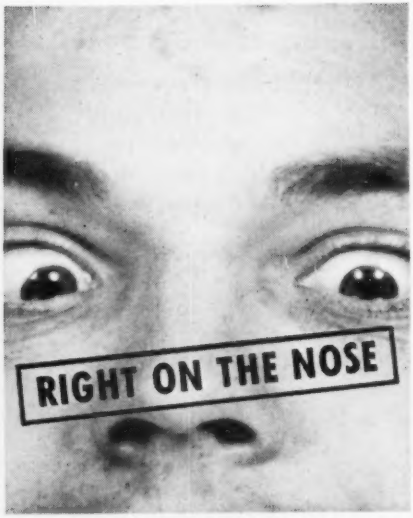

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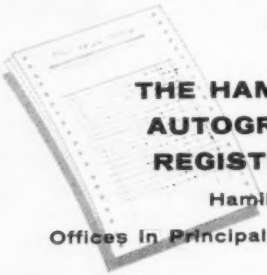

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For more Information Circle No. 230

ing Hanford originated speeches, articles, and their clearance, might serve as an appropriate example.

General Electric personnel at Hanford annually originate over 300 speeches and articles which are presented at professional gatherings and published in journals. After a Hanford author has obtained his supervision's approval of his paper and before he makes it public, he is required to have it cleared by a few GE and AEC reviewers. These reviewers check his material for propriety in public relations, legal and patent areas. Technical Information Operation is charged with the responsibility of obtaining these reviews on all Hanford speeches and articles, communicating review results to authors, and maintaining records describing this material.

Originally, descriptions of speeches, articles, and their clearance were contained on 5″ x 8″ (16 lb.) forms which were filed in a large visible file book while the material they described was being routed to reviewers. While in the book file, the forms were used to clerically log review progress. When all reviews were completed for a particular speech or article, the author was notified and the paper form was retired to a drawer file for later use as a reference source covering Hanford's speech and article activity.

Manual searching and rearrangement of the 5″ x 8″ paper forms was not adequate for quickly answering questions such as: How many Hanford papers were cleared for the March national meeting of the American Chemical Society? How many papers were cleared by our physics group last

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EX-3

For More Information Circle No. 229

month? What current Hanford speech material is available in the field of radiation biology? etc. But, the visual descriptions of the speeches and articles remained a necessity. So, to take care of both requirements, we condensed and simplified the forms and printed them on punched cards. Descriptive information was then typed on the card. While manuscripts were undergoing review, these cards were used as had been the paper forms, *i.e.*, to log review progress. After reviews were complete, the cards were then code punched.

Code punching identifies authors, dates, department designations, types of information, item number, etc. The punching is simultaneously interpreted across the top of the card, adding to the visual information already typed on the card. Of course, a big bonus from punching is realized when cards are quickly and accurately machine searched and organized. Our development of speech and article records to punched, yet visually useful, machine cards has been similar in intent to the other Technical Information records adaptations of punched cards. It should be emphasized that we did give thought and trial to various intermediate machine approaches before choosing multipurpose punched cards for the many record responsibilities of our operation. The use of typewriters which automatically prepared punched paper tape was one such approach.

Our respect for the marvels of electronic processing of information should be affirmed here. We don't intend to burn any EDP "bridges" behind us, but will continue to seek techniques that suit our needs.

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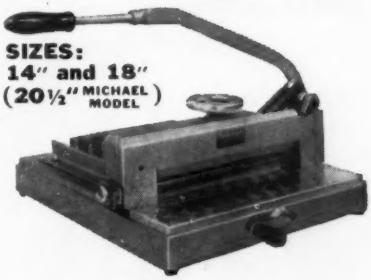

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When a claim is turned over for scrutiny by a specialist for one or more

(Continued on page 204)

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NEW Books

AUTOMATIC DATA PROCESSING SYSTEMS by Robert H. Gregory & Richard L. Van Horn. Wadsworth Publishing Co., 431 Clay St., San Francisco 11, 705 pp., $11.65.

A complete introductory work on EDP, this book is prepared from management's point of view. It shows how new technical developments may be put to work in the office, eliminating countless hours of tedious manual work. The book avoids highly technical terms so that it can be easily understood by the layman with no previous systems training.

PART-TIME EMPLOYMENT FOR WOMEN. Government Printing Office, Washington 25, D.C., 59 pp., 30 cents.

The women who work part-time, the jobs they hold, why they work part-time, duration of their employment, and a look at part-time work in the future.

HANDBOOK OF PUBLIC RELATIONS edited by Howard Stephenson. McGraw-Hill Book Co., 330 West 42nd St., New York 36, 875 pp., $12.50.

The fundamentals, methods and programs of good public relations are presented succinctly in this monumental work by 29 specialists in the field. It provides guidance to every major phase: planning policies, setting budgets, appraising results, managing staff, using research and psychology, counseling, etc. Shows how to effectively influence public opinion through magazines, newspapers, radio, TV and other media, and explains ways to achieve such objectives as building prestige, boosting sales or promoting a cause.

WORK IMPROVEMENT by Guy C. Close Jr. John Wiley & Sons, 440 Park Ave. S, New York 16, 388 pp., $7.75.

Incorporates the methodology and techniques of business, industry and service organizations to reduce costs and increase productivity. Explains the use of a systematic, organized method for solving cost problems in a practical manner. Useful for supervisors, executives and others interested in work improvement. Each technique is supported and illustrated by examples and case histories.

OFFICE BUILDING AND OFFICE LAYOUT PLANNING by Kenneth H. Ripnen. McGraw-Hill Book Co., 330 West 42nd St., New York 36, 192 pp., $10.

Gives practical counsel on every aspect of creating a modern office. Tells how to determine the amount of space required, how to make maximum use of space, what to look for in office construction, and how to choose new office space. Contains 60 illustrations.

HOW TO USE THE CALCULATOR AND COMPTOMETER by James R. Meehan. Gregg Div., McGraw-Hill Book Co., 330 West 42nd St., New York 36, 140 pp., $1.64.

Organized into three cycles of 12 lessons each on key-driven calculators. Each lesson paves the way for the next and old skills are constantly refreshed and expanded.

MATHEMATICAL METHODS FOR DIGITAL COMPUTERS edited by Anthony Ralston & Herbert S. Wilf. John Wiley & Sons, 440 Park Ave. S, New York 16, 293 pp., $9.

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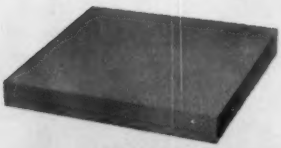

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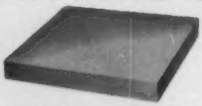

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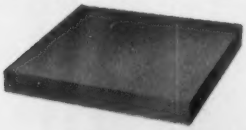

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It consists of 2 or more parts with interleaved carbon. Part one consists of a remittance statement and detachable tab card check which are sent to the vendor. Additional parts are for internal use.

"Redi - Checks" are available with magnetic ink characters, imprinted with name and address, preprinted with matching serial numbers, prepunched for data processing. Form sizes from 5½″ to 11″ in depth and to 25″ in width.

For more specific information on "Redi-Check", "Redi-Envelopes" or similar "piggy-back" type of forms for applications in sales, cost analysis, production control, etc., simply write

Tabulating Forms Division
CONSOLIDATED BUSINESS SYSTEMS, Inc.
Dept. A, 30 Vesey Street
New York 7, New York

For More Information Circle No. 206

←For More Information Circle No. 196

Introducing the ALL NEW
SELECTRIC® FILE

4 BASIC MODELS

Write For Catalog

NEW OPPORTUNITIES IN MASS CARD FILING

The LeFebure SELECTRIC FILE brings cards to the operator, instead of having operators chase after the cards. No unnecessary walking, reaching, stooping, pushing and pulling. Production is increased by operators being kept at work stations. No record is more than 1½ seconds away from the operator. To convert, all you do is transfer cards from your present file to removable trays of Selectric File. Will handle all card sizes.

another forward step in office efficiency

LeFebure *Business Systems and Equipment*

LeFebure Corporation, Cedar Rapids, Iowa

An Affiliate of Craig Systems, Inc., Lawrence, Mass.

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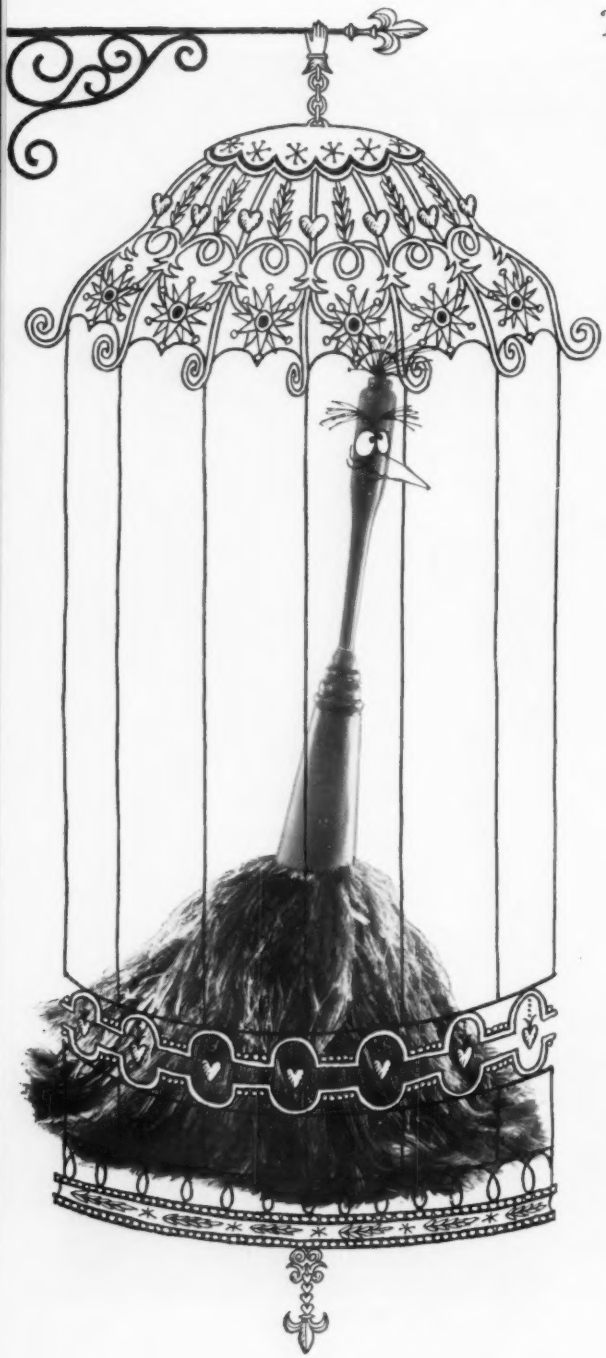


The last of the long-necked

DUST FLICKERS

Say farewell to old fuss-and-feathers—he'll soon be as extinct as the Dodo. For now there's a better way to dust. Cleaner, quicker, healthier.

It's new "SCOTCH" BRAND Dusting Fabric, the duster that *won't* scatter dust around!

This soft, scratch-free fabric catches up dust and holds it in thousands of tiny trap-like pores. Leaves no lint, no oily film.

Thrifty 30 yard roll gives you 60 generous dusters. Ask the boss to order "SCOTCH" BRAND Dusting Fabric today from your "SCOTCH" BRAND Tape supplier. Try it—and you'll never dust the old-fashioned way again!

"SCOTCH" IS A REGISTERED TRADEMARK OF 3M CO.

MINNESOTA MINING AND MANUFACTURING COMPANY

3M COMPANY

...WHERE RESEARCH IS THE KEY TO TOMORROW

For More Information Circle No. 212

Olympia precision typewriters

Standard Office Typewriter

...write best of all ... because they're built best of all

Lightweight Portable

Meet the Olympia Family of Precision Typewriters—preferred the world over for their quality, value and ease of operation. There's one designed for every typing need – whether for office, home, school or travel use. Each features the finest in typing aids—from convenient half-spacing to exclusive spring-cushioned keytops. Precision-built to the highest standards in Europe's largest, most modern typewriter factory. See—test—compare an Olympia before you decide on any other typewriter. You will find Olympia a solid investment in efficiency.

Find Your Nearest Authorized Olympia Dealer in the **Yellow Pages**

DeLuxe Portable

OLYMPIA DIVISION, Inter-Continental Trading Corporation, 90 West Street, New York 6, New York

For More Information Circle No. 234

it's **NEW**
—and outstanding

it's **NEW**
—and fast

it's **NEW**
—and dual purpose

it's **NEW**

—and it is available
NOW!

Order it today
from your local
Old Town
Dealer or write

IN THE HEAT PROCESS COPYING METHOD

COPY **COSTS** CAN BE **LOWERED**

BY AS MUCH AS **50%** WITH

TOWN-FAC

THE TWO WAY PAPER

OLD TOWN'S **NEW** DUAL PURPOSE COPYING PAPER

Yes it's true . . . you now can lower your per copy costs by almost 50% with TOWN-FAC. . . . Its dual purpose usage: as a carbonless copy paper or as copying paper — will lower costs even more — ask for a demonstration and prove to yourself that high copy costs are a thing of the past.

Old Town

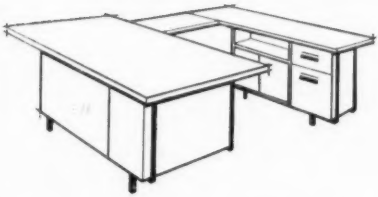
OLD TOWN CORPORATION
Established 1917
750 Pacific Street, Brooklyn 38, N. Y.

For More Information Circle No. 398

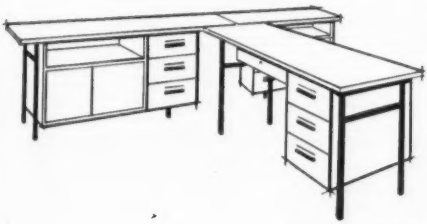
DISTINGUISHED ENOUGH FOR EXECUTIVE SURROUNDINGS

H·O·N
OFFICE EQUIPMENT

ECONOMICAL ENOUGH FOR DEPARTMENTAL AND SECRETARIAL



H-O-N "MILLION LINE" DESKS and Credenzas have colorful, textured vinyl-clad drawer fronts and panels. These units possess modular versatility for varied purposes and arrangements. H-O-N desks add dignity to the executive office, yet at the same time the moderate prices make them economically desirable for departmental and secretarial office uses. See your office equipment dealer today, or write to: THE H-O-N CO., MUSCATINE, IOWA.



For More Information Circle No. 282

Diehl

Automatic
Calculating Machine

Diehl

CALCULATING MACHINES, INC.

527 MADISON AVENUE, NEW YORK 22, N. Y.

Telephone: ELdorado 5-6066

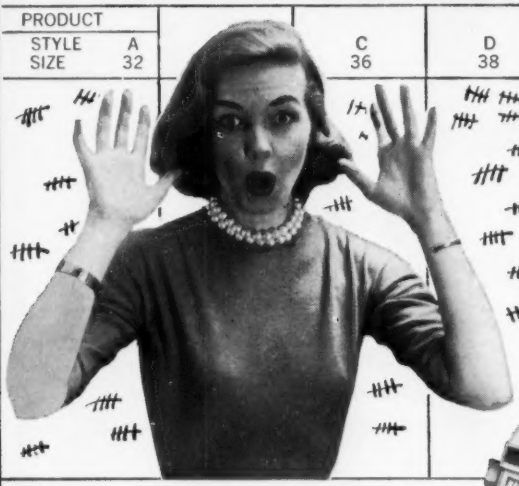
For More Information Circle No. 259

SCHERTEI

DON'T BE A HEN SCRATCHER

TALLY SHEET

PRODUCT / STYLE / SIZE	A 32	C 36	D 38	E 40	F 42



THROW OUT THOSE TALLY SHEETS

USE THE NEW

DENOMINATOR® MULTIPLE-TALLY

and save up to 50% time on anything you sort-count

Made up to meet your needs
12 Unit 2 Step—only 10"x6"

Stop using this mark ~~////~~ ~~////~~ ..it's obsolete! Get far more accurate results in half the time with the *new* low-cost DENOMINATOR MULTIPLE-TALLY! It's loaded with new features — years ahead in styling. Compact . . . simple to use . . . all-metal construction. Write Dept. 0-61.

The DENOMINATOR COMPANY, Inc.
261 BROADWAY, NEW YORK 7, N. Y.
Manufacturers of Tabulating Machines for over 45 years

For More Information Circle No. 274

THE ONLY ELECTRIC

SPIRIT DUPLICATOR WITH LEVER AUTOMATION!

The new Copy-rite duplicating machine is electric, compact, completely automatic, modern and streamlined in design. Takes all sizes from postcard to 9 x 14. Occupies only 16" x 24". Carries the famous Copy-rite Full Year Guarantee. By far the greatest advancement in the spirit duplicator field!

Free Demonstration. *Send us your name on a postcard. We'll arrange a demonstration in your office without cost or obligation.*

WITH THESE EXCLUSIVE FEATURES:

- One single lever for all operating actions
- Automatic stop after paper load is exhausted
- Exclusive margin adjustment during operation
- Pilot light signals end of run
- New feed table with no rubber parts

Copy-rite 1201 CORTLAND STREET
CHICAGO 14, ILLINOIS

WOLBER DUPLICATOR AND SUPPLY COMPANY

For More Information Circle No. 288

Genuine

STURDEX

...it takes a good business case to complete your sales picture!

Look what a *difference* STURDEX makes! The only business case made with the craftsmanship of finest leather cases . . . but at *half the price.* A sales-making case that's always neat and business-like . . a durable case that *outwears* all others . . . guaranteed for *5 full years!*

CATALOG CASE — Opens Wide and STAYS OPEN!

New flat-top Catalog and Sample Case with new STAY-OPEN feature! Exclusive hinges (patent pending) hold overfolding flaps wide open for easy access and viewing. Tremendous "box-type" capacity, yet weighs less than many smaller cases. Expanding side pockets for "file-cabinet" efficiency plus spacious center compartment for bulky extras. Famous PERMA-EDGES and PERMA-HANDLE will actually outlast the long life of this exclusive STURDEX business case. At stationers, luggage or department stores everywhere!

5-YEAR UNCONDITIONAL GUARANTEE

STURDEX looks new longer . . . always ready for business. So wearproof, waterproof and weatherproof, we guarantee it for 5 full years!

Leathercraft

World's Largest Manufacturer of Business Cases Exclusively

2320 So. Western Avenue • Chicago 8, Illinois

©1959

LEATHERCRAFT, Inc., 2320 So. Western Ave., Dept. A-10, Chicago, Ill.

Please send full details about STURDEX, and the name of my nearest dealer.

Name_____

Address_____

City_____ Zone____ State_____

For More Information Circle No. 287

For the world's best buy in manual typewriters try the precision-built Adler Universal, the machine with many extra features including eight extra characters. The carriage widths range from 12 to 35 inches. Try it in your own office today, there is no obligation. See your dealer or write: "addo-x inc," 300 Park Ave, New York 22, New York, Pl 5-5420

ADLER

Adler Universal

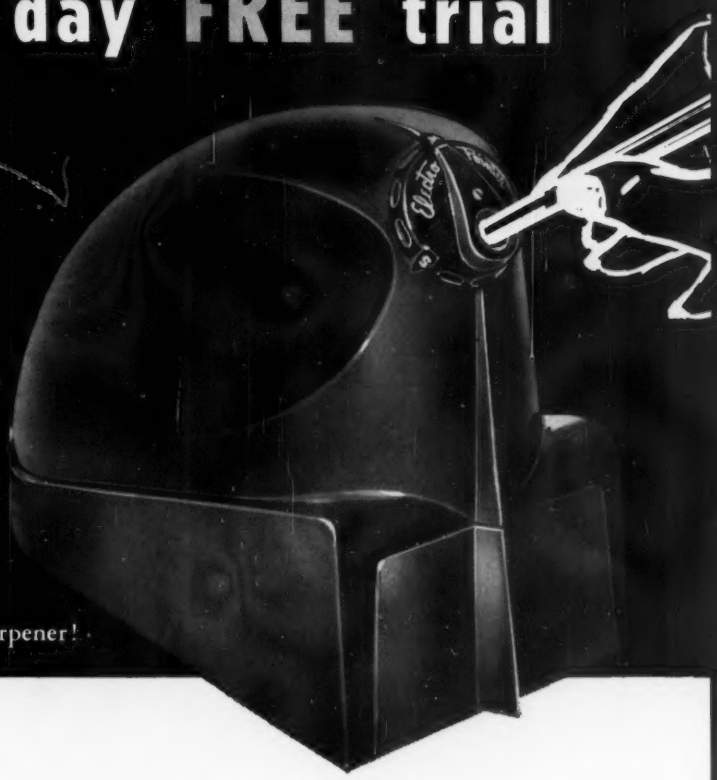
For More Information Circle No. 292

30 day FREE trial

the

ELECTRO POINTER

world's finest
electric pencil sharpener!



Here's a sharpened tip for you that will make a very telling point: the ELECTRO POINTER is the biggest office efficiency innovation since automatic computing machines. If you don't agree, after 30 days, send it back . . . no charge . . . no obligation.

try it . . . and you'll buy it!

STILE-CRAFT

Manufacturers, Inc.

1825 MACKLIND AVE.

ST. LOUIS 10, MO.

For More Information Circle No. 213

STILE-CRAFT Mfrs., Inc.
1825 Macklind St. Louis 10, Mo.

Prove your point! Send me an ELECTRO POINTER for a 30 Day Free Trial. Then, bill me $32.95 plus taxes and shipping, if I decide to keep it.

YOUR NAME _____
FIRM NAME _____
ADDRESS _____
CITY _____ STATE _____

Our Golden Rule

"...unmeasured service to a distinguished list of customers."

We are proud that the superior quality of our products has earned us the friendship of so many fine firms, and we take extra pride in meeting their special requirements with care and promptness.

We at Colonial will be happy to discuss *your* special requirements ... may we hear from you?

Specialists in the manufacture of spirit master units, spirit carbon, hand cleansers and fluids.

Colonial Carbon Company SKOKIE, ILLINOIS

Serving the wholesale trade exclusively

your complete line of money-makers:

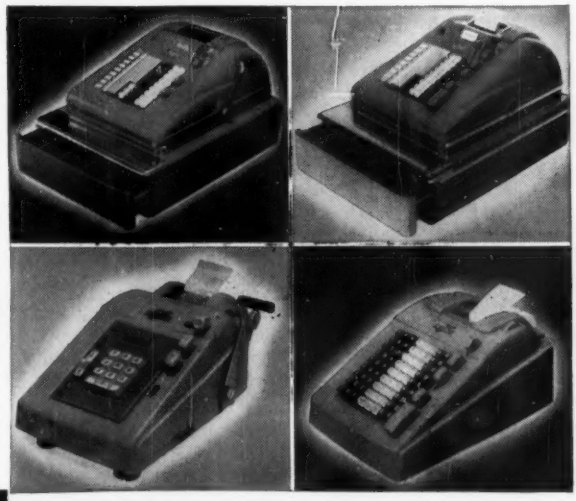
itemizing cash registers adding machines • safes

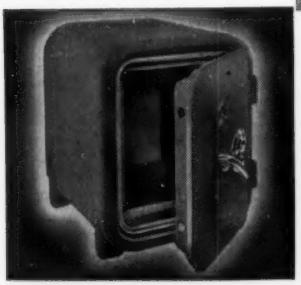
Here is the opportunity of your lifetime! The complete line of low-priced REGNA cash registers and adding machines means: PROFITS, PROFITS and more PROFITS!

Fascinating, jet-aged models meet every demand of today's and tomorrow's business-builders. Choice of electric, hand, 10-key or full-keyboard.

Send today for information and literature.

Move fast — it's profitable!





JOELI fireproof safes, of revolutionary new design, sweep the world with fantastic sales success. Several sizes and models available.

In Canada: Regna Cash Registers of Canada Ltd.
704 Notre Dame St. W. Montreal, Que.
OUTSIDE CONTINENTAL U.S.:
Jorgen S. Lien, Box 522, Bergen, Norway

It's low-priced! It's profitable!
Mail the coupon. Mail it today.
Mail it NOW!

REGNA CASH REGISTERS INC.
175 Fifth Avenue, New York 10, N. Y.

Gentlemen:

Please rush more information on the complete line of REGNA cash registers, REGNA adding machines, Joeli fireproof safes, and outline advantages of becoming an independent Regna-Joeli Dealer.

NAME .....

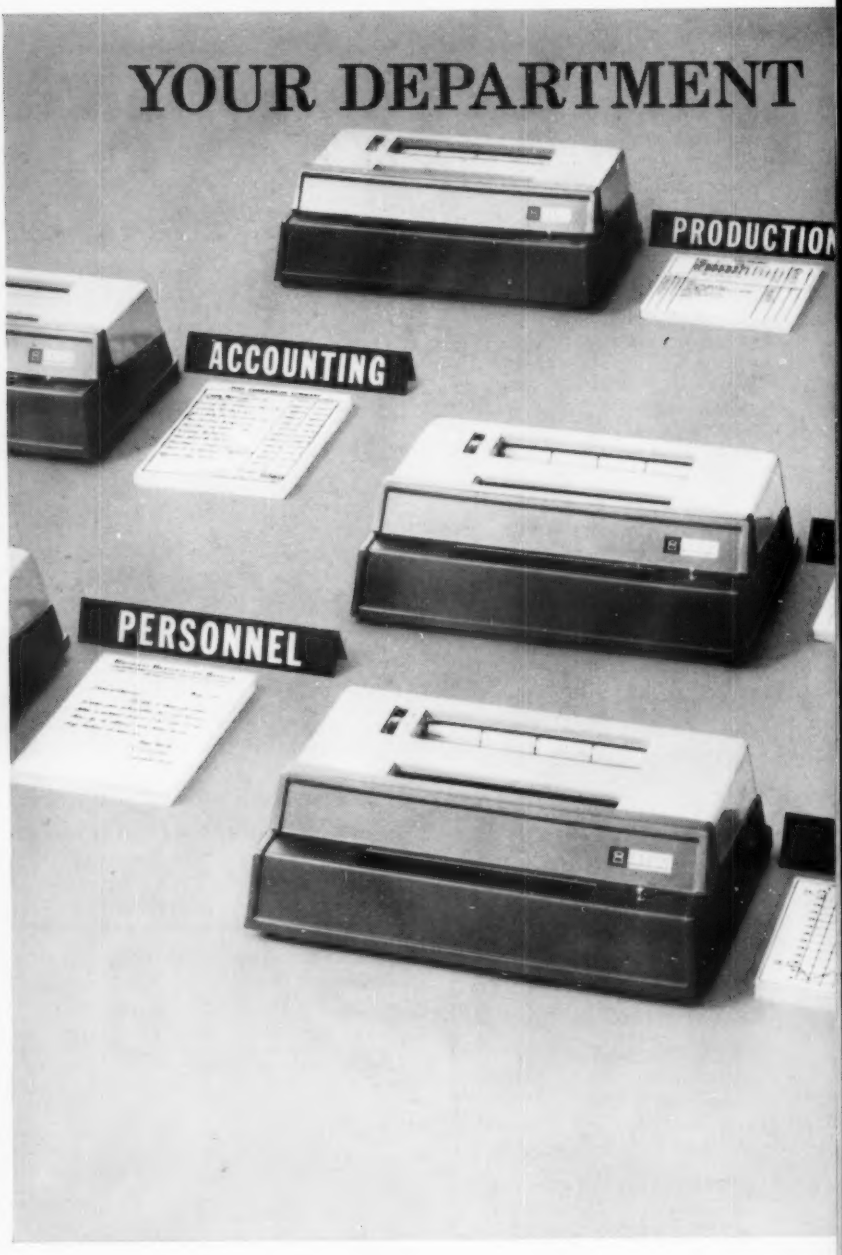
ADDRESS .....

CITY .....

ZONE ..... STATE .....

For More Information Circle No. 245

←For More Information Circle No. 200


YOUR DEPARTMENT
PRODUCTION
ACCOUNTING
PERSONNEL

SHOULD OWN ITS OWN

Stand firm—demand the full-time services of an A. B. Dick Model 101 Photocopier. Exemplary black-on-white copies can be yours on the spot, the minute you need them. You'll remove the delays that sidetrack your secretary at central copying departments. Actually, there's no reason why every department shouldn't have one. Surely not price—not at

$99.50

Manufacturer's suggested retail price subject to change without notice. Other models also available.

A·B·DICK
DUPLICATING PRODUCTS

A. B. DICK Company
5700 W. TOUHY AVE., DEPT. TO-7
CHICAGO 48, ILLINOIS

FREE! Send new brochure "How to save time and get more work done during working hours."

Name _____

Position _____

Company _____

Address _____

City _____ Zone _____ State _____

For More Information Circle No. 308

Prices F.O.B. New York—Slightly higher Denver and West

...our Thomas Collator earns its $149.50 cost every 2 months!"

Time savings does it! With the *Gatherette* electric collator one girl collates where before it took three!

What's more, she does it comfortably at her desk. And when she's finished, the lightweight and compact *Gatherette* is no trouble to put away.

Why continue tiring, time-wasting hand gathering of duplicated sheets into sets? A *Gatherette* can work wonders in savings and morale! The Thomas people will gladly demonstrate that. Write them today and see.

Thomas Collators Inc.

100 Church St., Dept. B1, N.Y. 7, N.Y.

For More Information Circle No. 258

Camera!

Gen. David M. Shoup, Commandant of the Marine Corps, sets in motion a nationwide computer network to handle Marine Corps personnel records. The system will store 23 million facts on 20 reels of tape—over 150 separate items about each of the 475,000 regular and reserve Marines. In less than 24 hours, the system can give planners a detailed picture of manpower needs to bring each unit up to combat strength. Stanley C. Allyn, NCR board chairman, is at right.

Marine's Personnel Computer System

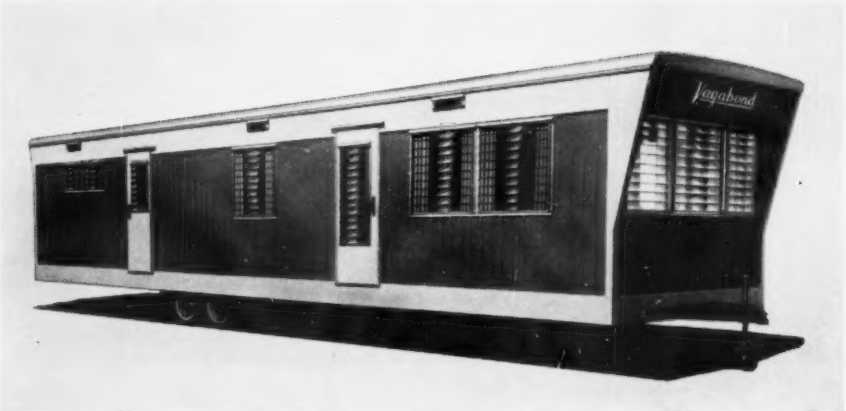
The Marine's system comprises three NCR 304 electronic computers in Washington, D.C., Camp Le Jeune, N.C., and Camp Pendleton, Calif., linked by leased wire. The Washington installation is the master control center. Any one of the offices can take over the entire job in the event the other two are unable to function due to enemy action or any other reason.

Looking as if it were built back in colonial days, the new headquarters building of Berkshire Life Insurance Co., Pittsfield, Mass., follows traditional style and blends into the landscape. Hoyle, Doran & Berry were the architects.

Berkshire Life's New Offices

Area housing secretary to the treasurer and office corridor is good example of the handsome architectural lines achieved by Designs For Business, Inc., New York, in expressing basic modular system applied throughout. Partitions were made by Aetna Steel Products; desks by Globe-Wernicke; luminous ceiling by Smithcraft Lighting; as designed by G. Luss. Agency dept. (below), has standard desks from Art Metal Co.; chairs are in brilliant hues of red, yellow, blue green and orange. Glass panels of hue-white, rough-rolled plate by Libby Owens Ford. Overfile storage by Ezra Blank Associates. (See opposite page.)

Area (above) houses duplicating and supplies; storage units and shelving by Arc Apex, lockers by Penco. A massive 31 x 126 ft. space was designed as a combination cafeteria-lounge. Note the use of decorative plants along glass panels separating cafeteria (center) from kitchen. Lounge (below) has colorful furniture by Dux, Inc.

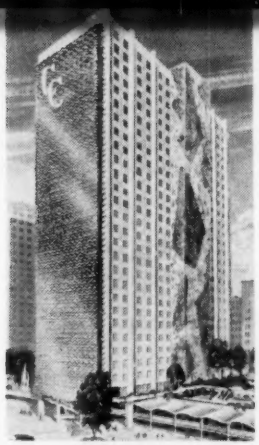


Ready-Made Mobile Offices

Made by Vagabond Coach Co., New Hudson, Mich., this traveling office is claimed to be the first to be mass produced, the manufacturer estimating sales of at least 200 such units annually. Available in 42, 46, 50 (shown here) or 54 ft. lengths, the units are all 10 ft. wide, affording up to 506 sq. ft. of office space. Exteriors are of Colorweld aluminum by Reynolds Metals Co.

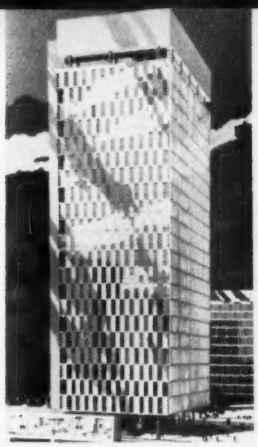
Custom interiors feature oak paneling, radiant floor heating, separate offices, reception room, restrooms, airconditioning and storage space. For More Information Circle No. 185.

First Charles Center Building In Baltimore



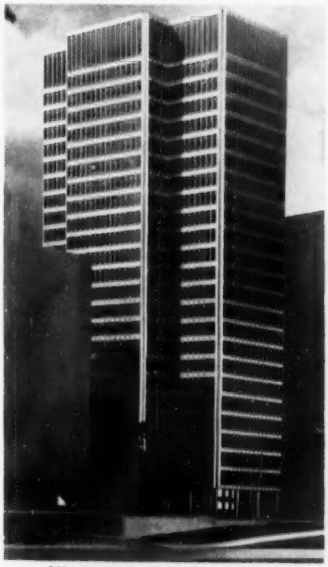
Bush Construction Co., Norfolk. Architect: Charles F. McKirahan.

Metropolitan Structures, Inc., Chicago. Architect: Ludwig Mies van der Rohe.



E. J. Frankel Co., Philadelphia. Architect: John Hans Graham.

Charles Center is a dramatic new downtown Baltimore rejuvenation building program headed by a special commission of the Urban Renewal & Housing Agency.

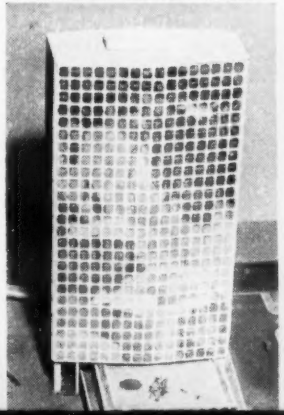


All photos by Baltimore News-Post and Sunday American

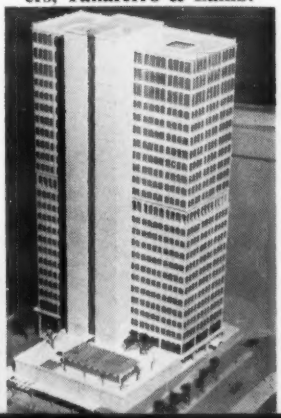
The commission recently called for proposals for the first office structure for Charles Center. Here are artists' renditions of the six plans submitted. Winner: Metropolitan.

American Trading & Production Inc., Baltimore, and McCloskey & Co., Philadelphia. Architect: Marcel Breuer.

Roscoe - Ajax Construction, Inc., Washington. Architect: Edwin Weihe.



Community Research & Development, Inc., Baltimore. Architect: Rogers, Taliaferro & Lamb.



The Many Uses of Magnetic Tape

Magnetic tape's many uses in the home may start with the recording of a youngster's first words.

Robert A. von Behren, head of magnetic products research at Minnesota Mining & Mfg. Co., with a satellite tape recorder.

This 2400 ft. reel of half-inch magnetic tape holds ten million characters, equivalent to data stored on 125,000 punched cards.

At left: Language labs use tape recorders as a teaching aid.

At right: Radio stations record programs on tape for later broadcasting.

Recently inaugurated, Pepsi-Cola Company's offices on New York's Park Ave. reflect management's realization that employees spend a major part of their waking hours in their working environment. Typical reception area is seen at right.

Pepsi's New World Headquarters

Clerical work areas are off-white with black line accents. Suspended ceilings — luminous at the perimeter—are plenums drawing air in along the core. An innovation is the use of individual steel wall panels by Skidmore, Owings & Merrill, based on a 4 ft. 6″ module.

Executive offices have heating-cooling units, guard rails, vertical plastic blinds over 10 ft. high, contemporary furniture, and ceiling return-air slots.

Environment for Creative Design

Armstrong Cork Co., Lancaster, Pa., believes one way to improve artwork is to provide a better work area for designers. Low partitions in each unit of the firm's new advertising design studio allow free communication between designers yet provide privacy. One-piece unit (right) has good lighting, ample and accessible drawer space, and adequate table room.

Waiting area has furniture and partitions mounted on tubular steel legs for flexibility and ease of maintenance.

Higher parcel post rates demand accurate scales!

Parcel post rates were raised an average of 17% this year. Have you checked your mailing scale lately? If your scale is old and inaccurate you may be wasting postage on your parcels. The excess can cost you a sizable dollar loss in postage in a year.

If your scale underweighs, your parcels are carrying insufficient postage—delaying delivery, and making a poor impression on customers who have to pay "Postage Due" charges on your packages.

Now, more than ever, a dependable precision-built scale is a real economy. Pitney-Bowes makes the best!

Pitney-Bowes Model 3700 Parcel Post Scale has a key for each zone. Press the key and air and surface rates in contrasting colors are shown in illuminated magnified figures—reducing errors, avoiding eyestrain, saving time. Accuracy is assured indefinitely by lifetime ball bearings. Capacity 70 lbs.

Another PB Scale, the S-510, has 10 lb. capacity; shows rates for all classes of mail; has large chart markings, easy to read.

There are five other PB Scale models. Ask the nearest Pitney-Bowes office for a free demonstration. Or send coupon for free, illustrated booklet.

FREE: *Handy desk or wall chart of postal rates, including recently increased parcel post rates.*

Pitney-Bowes

Mailing Scales

Originator of the postage meter . . .
139 offices in U. S. and Canada.

PITNEY-BOWES, INC.
3483 Walnut St., Stamford, Conn.
Send free booklet ☐ *rate chart* ☐

Name _____

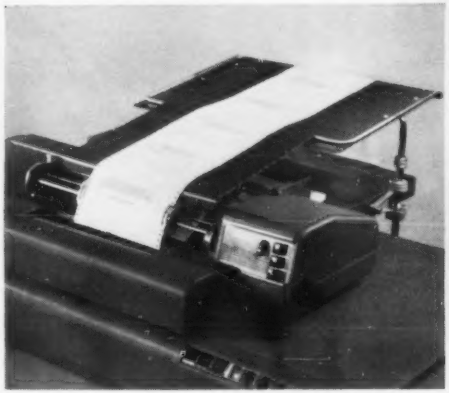
Address _____

For More Information Circle No. 240

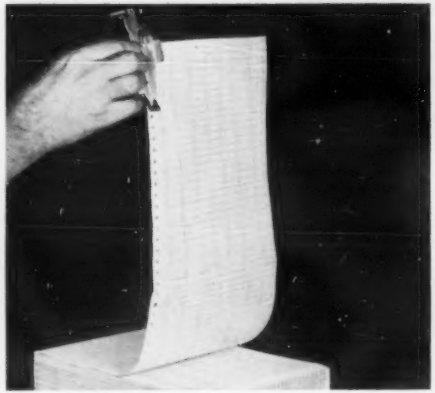
NEW

Moore Speediflex

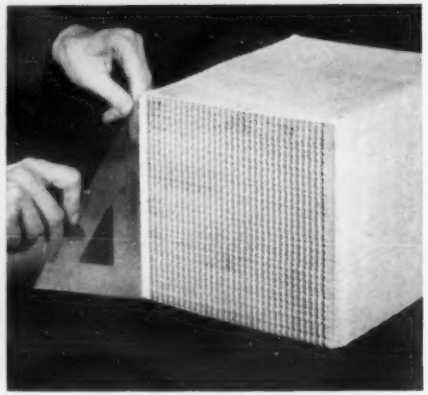
GIVES YOU THESE THREE FORMS-HANDLING BENEFITS



1 PERFECT FEEDING—The entire set of parts and carbon feeds, naturally and in perfect alignment, around the writing platen.



2 PERFECT REGISTER, because there's no tenting or peaking, and both sides flow freely in natural, flexible movement.



3 PERFECT REFOLDING in neater square packs results from still another advantage—Moore's unique way of perforating the sets.

This Moore 'first'—a brand new concept—results in new forms-handling efficiency for users of continuous marginal punched forms. The revolutionary new dimension is the flex-cut carbon. It acts as a flexible bond between the various parts, and allows the Speediflex unit to flow naturally without 'tenting' or 'peaking,' aligning at the point of writing for perfect part-to-part register. This great new form introduces many other forms-handling benefits. For a demonstration, look up the Moore man in the telephone directory or write the nearest Moore office.

Speediflex is a patented product of Moore Business Forms, Inc.

MOORE BUSINESS FORMS, INC., Niagara Falls, N. Y.; Denton, Texas; Emeryville, Calif. *Over 300 offices and factories throughout the United States, Canada, Mexico, Cuba, Caribbean and Central America.*

MOORE®

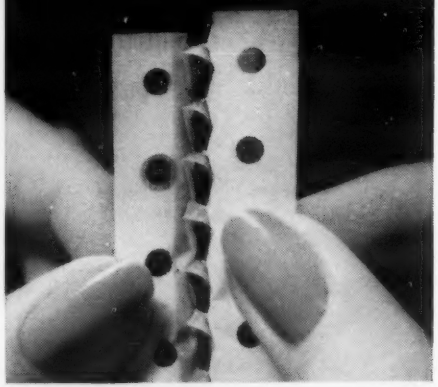
Build control with

MOORE BUSINESS FORMS

For More Information Circle No. 275

THE SECRET OF SPEEDIFLEX

The parts are bonded together by flex-cut carbons, allowing flexibility in movement of forms that has never been possible before.



For More Information Circle No. 208

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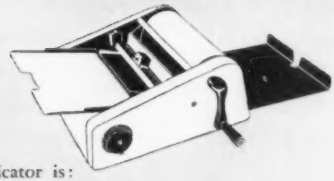

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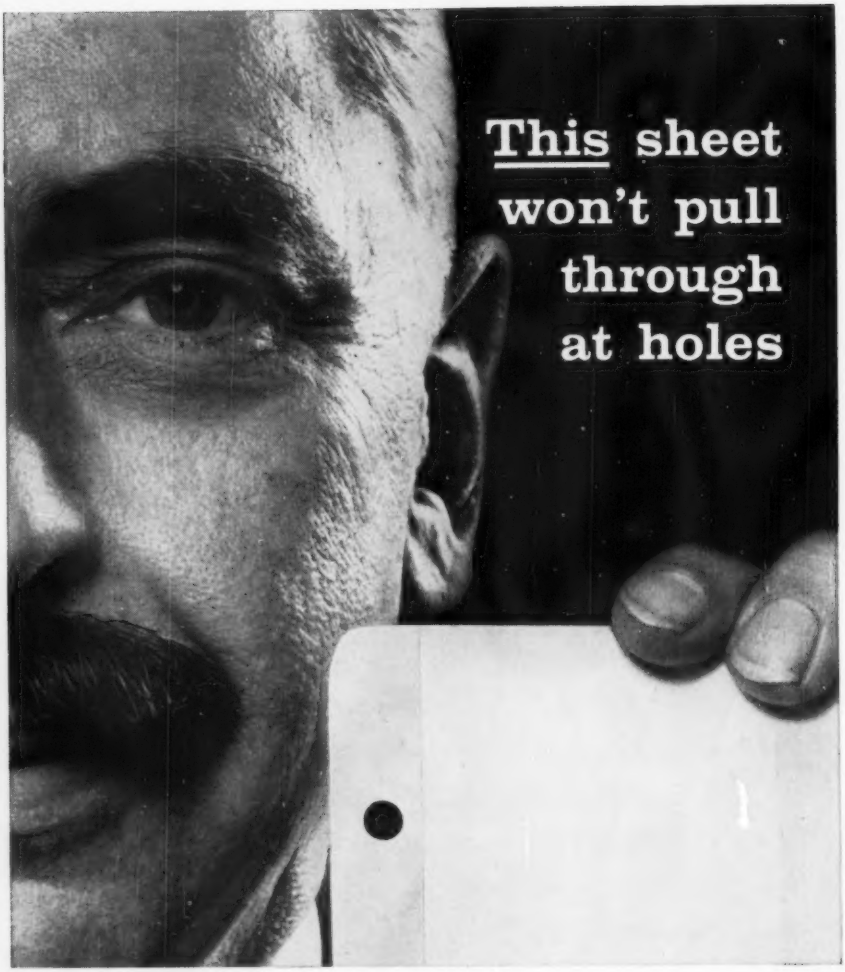

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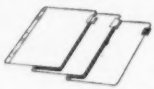

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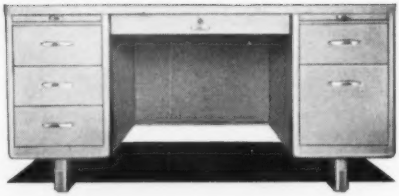

Recently, some people have suggested that we do.

We guess they mean we should use less steel or lighter steel, or that perhaps we should use fewer reinforcement welds. Or maybe that we should cut out some of the extra features—like drawers for example—that our desks have built in.

We've done some thinking about these things.

Our designers tell us that 260 pounds of good steel go into an average 30″ x 60″ Stylemaster desk. Any less steel than that, they say, would result in a desk that would soon begin to shimmy and look shabby.

We looked into the many desk reinforcement welds we use. Maybe one or two of these welds are unnecessary. We're not quite sure. But we haven't seen a Y&E desk top in any shape other than completely flat.

We could use bolts or metal screws instead of welds, but we know that our welds are as strong as our desk steel. They won't become loose and won't shimmy.

A lighter desk, with fewer reinforcements, our designers say, would mean a big BOINGGG every time a drawer was banged closed, or the desk was kicked. We might get away with it by using sound-smothering insulation strategically hidden away in key spots.

We thought about it.

But, if you ever happen to kick a Y&E desk or slam its drawers, that solid, honest CHUNK you'll hear is not smothered by anything other than sound construction.

We searched our desks for extras which we could eliminate and found a couple of possibilities. We could make something called removable case strips *fixed* by welding them. This removability feature is expensive and some people never use it. However, because of it, if you want to rearrange the drawers of your Y&E desk in your office, you can. Removable case strips make it a cinch. Meaning that shifting drawers in a Y&E desk never tries the temper.

We did find one thing we could take off our desks without impairing its function. Our name plate. It reminds you of the quality you've purchased. But we'll leave it off for you if you think it's too frilly.

If our desks are too good, we can't say we're sorry. It may, in fact, be that the styling for our basic lines will never grow old, because it just seems to fit into most situations quite nicely and is so easy to live and work with.

We make several different kinds of desks now—different styles for different office functions, executive to secretary. We may add more. But we'll continue to make desks and other equipment that is functional, operates smoothly, looks good, and lasts a little bit longer than many things seem to these days.

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For More Information Circle No. 220

COLOR PLANNING FOR OFFICES

HOWARD KETCHAM, President, Howard Ketcham, Inc., Color, Design & Illumination Engineers, New York

COLOR AND LIGHT can do as much to build efficiency in the office as they can in the plant. Correct color and lighting can relax tensions, improve morale, decrease absenteeism and stimulate output. They can break up a bleak institutional atmosphere and convert an office into a comfortable and cheerful place to work.

In the early days of office styling no one paid much attention to appearance. Walls were painted ivory; floors were covered with innocuous baize or green carpeting; fumed oak furniture prevailed. Office work was drudgery largely because the office was about as convivial as a prison cell.

Today all that's changed. An official of National Office Management Assn. recently classed professional color planning on a par with such things as job evaluation, aptitude testing, air-conditioning, and recorded music in achieving a well-rounded personnel program.

While there is increasing recognition by designers and manufacturers of the importance of color in the office, many office executives are at a loss when called on to make a decision in this regard. This article will discuss some of the uses of color and attempt to answer the basic questions: what colors? which lights?

Office colors have to meet specific requirements. These are down-to-earth needs. They don't depend on the caprice of the president's wife or the inspiration of his secretary. They depend on demonstrable considerations of efficiency and economy.

Office colors must not be distracting or disturbing. Such colors pull the employee's eye and attention away from his work and leave him staring at the wall. The distracting colors are the intense, powerful ones; your offices' colors should be suitably subdued. They should be keyed to the desirable associations appropriate to your business: feminine colors for a cosmetics firm, masculine colors for a trucking company, clean and appetizing colors for a food processor, smart and luxurious looking colors for a fashion house, striking colors for an advertising agency, down-to-earth colors for a variety store headquarters.

Colors need not be monotonous. Insipid, spiritless colors endow your place of business with all the vitality and cheerfulness of a London fog. The idea is to diversify your colors and color plans. You can insure a stimulating office atmosphere by using a variation of warm and cool colors to change the conventional box-like shape of a typical office working area. Certain colors can make a wall appear to be further away from the worker's desk,

White	82
Cream	77
Yellow	74
Light Pink (Rose)	70
Tan	60
Light Gray	54
Light Blue	54
Light Green	50
Orange	48
Blue-Green	43
Rich Blue	34
Dark Green	21
Red	14
Brown	14
Olive Green	8

Approximate light reflectance percentage of typical office wall colors, listed in descending order of efficiency.

others make it seem closer. Vibrant colors serve to produce refreshing accents in areas not used as actual working spaces—corridors, storage bins, utility rooms, reception areas, washrooms, entrance halls, etc.

A top advertising executive introduced a certain shade of yellow into a special room reserved for brainstorming sessions. Yellow memo pads, even yellow pencils were used to gain maximum effectiveness from the cerebral stimulus this yellow is credited with evoking. Be this as it may, colors do induce moods. The emotional responses to colors are more or less standard as follows:

Warm colors: yellow—stimulating; orange—cheering; red—exciting.

Cool colors: green—neutralizing; blue—soothing; violet—depressing.

A tool the experienced color engineer likes to use in his fight against monotony is the movable partition. Color plans recently introduced for the huge new Department of Defense Building in Maryland are based on a special range of compatible colors for partitions of this sort. They have one color on one side, another on the other. Personnel rearrange these partitions from time to time as their work requirements change. The variety of colors permits them to create attractive and harmonious environs, the partitions being compatible with all of the other colors used for the rest of the building's decor. Thus the interior is divided by color screens creating an atmosphere of informality and privacy.

Office colors must be easy to maintain. Many office executives, knowing the good light reflecting power of pastel colors, prescribe them for their company's work areas. Light, bright colors save on the electric bill. But such colors soil readily and do an admirable job of showing dirt. This means extra wash jobs and frequent repainting. With today's high labor cost such partial planning is seldom practical.

The solution is to utilize a few colors properly, not a great variety haphazardly. Dirt is most efficiently camouflaged on certain varieties of beiges, buffs, grayed greens and rose. Avoid colors that tend to hide the dirt at the expense of looking dirty themselves, such as certain grays. There is too great a tendency to use gray when in doubt. But this color has long been abandoned as a basic decor—even in prisons. Most grays are usually spiritless, drab and depressing.

Office colors should promote efficiency. Here are some of the psychological effects commonly associated with colors used in offices:

Rose: induces cheerfulness, though some dark reds can be depressing and certain bright reds irritate.

Pink: associated with femininity and frivolity.

Light orange: looks appetizing and clean, though grayed orange and certain tans merely look drab.

Pale yellow: suggests daintiness; stronger yellows are stimulating.

Light yellow-greens: certain shades associated with freshness, though olive greens bring to mind an impression of decay.

Light blue: is tranquil and restful; dark blues can be depressing in large areas in a private office.

Purple: productive of melancholia and irritability.

If your office is located in the warm south, paint it in cool pastel blues or blue-greens. If your office has little natural light or is gloomy and dull, freshen it up with cream, tan, yellow-green or goldenbeige. If there is too much sunlight try soothing turquoise.

Many firms ask the consultant to prescribe a range of individual "color menus" and let their employees choose. This is a fine way to develop real interest in your business and boost morale. It gives your employees a degree of participation—particularly important on the distaff side. Futhermore, an attractive and cheerful office does a public relations job for the occupant— it should be as individual as his signature.

Preparing office color specifications. One of the most important requirements in preparing office color plans and specifications is a means of communicating the essentials of the theme to the various contractors, suppliers and manufacturers who must provide the desired colors and materials and their correct placement. For the consultant, this phase of the work is quite complicated, especially on a large project. Our organization has developed a fool-proof system for scheduling color plans in such a manner that they can be effectively incorporated in subcontracts with the electrician, painter, ceramic and floor tile contractors, etc. Previously, our carefully integrated color schemes had a way of getting diluted or lost among individual whims. We have designed a simple form that we supply

WALLS	FLOORING	DRAPERIES	UPHOLSTERY
Tan	Dark Green	Yellow-Green	Yellow-Green
Emerald Green	Rich Blue	Rich Blue	Vermilion
Blue-Green	Rust	Heather Mixture	Blue-Green
Yellow-Green	Tan	Silvery Gray	Natural Leather
Oyster	Silver Gray	Silver	Pale Brick Red

Use a few colors properly, not a variety haphazardly.

DIFFICULT AND CRITICAL SEEING TASKS Prolonged work and office work involving fine detail, moderate contrasts, overlong periods of time.	**70**
ORDINARY SEEING TASKS Office work involving moderately fine detail, normal contrasts, intermittent periods of time, such as switchboards, continuous process, conference and file rooms.	**45**
CASUAL SEEING TASKS Such as stairways, reception rooms, washrooms and other service areas, active storage	**35**
ROUGH SEEING TASKS Such as hallways, corridors, passageways, inactive storage	**20**

Recommended minimum levels (footcandles) of illumination, on work area or 30″ above floor.

in quantity so copies can be given to each subcontractor or workman concerned. This is good insurance. It avoids undesirable compromises. It protects the overall quality and vitality of the finished job.

Authoritive and imaginative color planning is essential to the modern office. Color is the first thing noticed by anyone entering your office and the one thing likely to be remembered longest. It usually costs no more to use color correctly. A working area that is merely visually exciting or arresting not only distracts from efficiency and performance, but also becomes dull and tiresome to live with. Always remember that a high percentage of our population spends more time in the office than at home.

Today, color planning is a must in offices. This way functional standards can be set up whereby those untrained in color work can use color effectively. Most of all, such planning assures an agreeable working environment for the millions who will live and work in offices for a long time to come.

"Who changed the brand of coffee in this machine?"

How Statistical Sampling Improves Office Operations

BENJAMIN J. MANDEL, Chief, Statistics Branch, Bureau of Old-Age & Survivors Insurance, Baltimore

SCIENTIFIC STATISTICAL sampling can aid management extract, often quickly and inexpensively, valuable factual information from office records and activities. This can aid in making rational decisions regarding the office staff and its procedures.

Scientific statistical sampling is the random selection of a part of a whole (universe) for the purpose of drawing conclusions about the entire universe by a study of this part. Instead of making a complete statistical count, we need only count or examine a portion of the total to arrive at a reliable figure. To be *scientific*, however, the random selection must not be haphazard but must be controlled to assure uninhibited operation of the law of probability.

Statistical sampling can be used in very many office operations. The following general guides may help you determine the areas to which it may be applied:

What is being done by the staff, and what it costs to do it?

How long it takes to do various types of work?

How well the work is being done?

How effective present methods are for doing the work?

Are office policies and procedures being carried out?

Are there possibilities for fraud? Is there any fraud and how prevalent is it?

Is there any waste effort?

These and other questions dealing with knowledge of what is going on in the office and with testing new ideas, procedures, efficiency, etc., may be answered by scientific sampling applications.

One of the best ways of judging the value of scientific sampling is by seeing the results achieved by its use. In the Bureau of Old-Age & Survivors Insurance, a large variety of management questions are continually being answered as a result of statistical sampling. Some illustrations follow:

Through the use of work sampling techniques the management staff learns what proportion of the time of the field staff of some 12,000 employees is devoted to selected office activities (See Exhibit 1).

How long it takes on the average to complete various stages of work in processing claims for old-age and survivors insurance benefits (See Exhibit 2).

The main factors which have been responsible for errors in some of our office operations (See Exhibit 3). These data have helped us to evaluate the ex-

In addition to his position with the Social Security Administration, the author is chairman of the statistics department at the University of Baltimore. His book, *Statistics for Management* (Dangary Publishing Co., Baltimore 1, Md., $6), is recommended for further reading on statistical sampling.—ED.

tent to which procedures were misapplied in a specified area.

The amounts involved in settling one of our accounts with the Treasury Department are based on estimates derived from scientific samples.

Other illustrations are: determining a policy for direct mail development of certain types of claims for OASI benefits; deciding whether to purchase social security account number card sealing machines for our district offices; determining the effectiveness of Bureau medical examinations to employees of the Bureau who volunteered for such examinations; and measuring the amount of sick leave used by Bureau employees.

There must be a clear definition of the population to be surveyed, or lot to be examined, before a sample may be drawn to serve a given purpose. This definition should identify clearly and specifically the universe or mass (file or people) to be studied. In addition, the goals to be served by the data and manner of their use must be clarified, so that the sampling can be done on a scientific basis designed to meet these purposes. Management must also specify the minimum degree of accuracy needed in the end results.

The basic criterion in selecting a scientific sample from a given population is that each item (or unit) must be free to enter the sample by chance (probability), and with a known chance. This method is called a random selection technique, *i.e.*, it applies the principle of probability. The selection, therefore, cannot be haphazard or on a take-them-as-they-come basis, but must be guided to assure free operation of chance.

There are many different ways of selecting scientific (probability) samples. When each of the units (such as pieces of paper or forms) in the universe is considered equally important, the sample should be selected in such

Activity	Percent of Total Time					Number of Minutes Per Unit of Work				
	FY. 1959	Sept. 1958	Dec. 1958	March 1959	June 1959	FY. 1959	Sept. 1958	Dec. 1958	March 1959	June 1959
Total	100.0	100.0	100.0	100.0	100.0	---	---	---	---	---
Handling childhood disability claims	0.7	0.7	0.8	0.8	0.7	236	273	248	237	242
Issuing account numbers	2.5	2.8	2.4	2.3	3.3	5	5	7	6	4
Providing earnings record service	1.3	1.2	1.1	1.2	1.3	61	43	71	93	67
Handling wage claims	9.7	10.2	9.1	10.2	9.3	144	147	149	151	155
Handling agricultural self-empl'd claims	3.3	2.8	2.0	4.9	3.7	295	331	284	277	346
Making benefit recomputations	0.9	0.9	0.5	1.1	0.6	80	86	82	90	101
Other activities	81.6	81.4	84.1	79.5	81.1	---	---	---	---	---

Exhibit 1. Estimated percentage distribution of total time and average number of minutes per unit of work for selected clerical activities in selected months, as determined by a BOASI district office work sampling project.

	August 1959	September 1959	October 1959
Total New Awards			
From Filing to Certification	45.6	42.7	39.5
From Filing to Receipt in PC	24.6	23.3	21.8
From Receipt in PC to Certification	21.0	19.4	17.7
From Receipt in PC to Claims Authorization Review	13.9	11.5	10.5
From Claims Authorization Review to Certification	7.1	7.9	7.2
Regular New Awards			
From Filing to Certification	39.7	35.9	32.6
From Filing to Receipt in PC	23.1	21.5	20.5
From Receipt in PC to Certification	16.6	14.4	12.1
From Receipt in PC to Claims Authorization Review	9.9	6.9	5.8
From Claims Authorization Review to Certification	6.7	7.5	6.3
Delayed New Awards			
From Filing to Certification	97.8	92.5	74.7
From Filing to Receipt in PC	37.9	36.7	28.9
From Receipt in PC to Certification	59.9	55.8	45.8
From Receipt in PC to Claims Authorization Review	49.9	45.1	33.8
From Claims Authorization Review to Certification	10.0	10.7	12.0

Exhibit 2. Average processing time (in days) for the various steps in handling claims for old-age and survivors insurance benefits.

a way as to give each unit an equal chance of being drawn into the sample. A table of random digits usually provides the best method for such simple random selection.

Systematic random sampling is frequently a more efficient and practical method than the foregoing simple random method. Items can be purposely selected from all parts of the universe, without bias. First, the skip-interval or the sampling rate is established by dividing the total number of items in the universe by the number to be included in the sample. Then, a random starting point must be determined by reference to a table of random digits. After that, items are counted systematically from this random starting point to include the ones that appear at the skip-interval.

Stratified random sampling is used if the items to be sampled vary widely in their characteristics, and it is possible to identify homogenous groups of such items. We get a truer picture by selecting a random sample from each known group separately. For a fixed size of sample, greater reliability is usually obtained by a stratified sample than by a simple random sample.

Sample size may be considered in

two ways: (a) the number of units in the sample as a percentage of the total units in the universe; and (b) the actual numerical size or number of units in the sample. The actual numerical size is more important in getting reliable results than the percentage size. In dealing with large universes, the size of the universe or total file is usually a minor factor in determining the size of the sample.

Sample size is not determined by any arbitrary method. A basic criterion is the accuracy desired in the results or estimates to be made about the universe. Other criteria are: extent of variability in the universe (the extent to which the characteristics of the items differ from their average value); amount of money one is willing to spend to compile the data; and administrative considerations, such as timing and detailed amount of information sought.

Whenever data are compiled, whether from a sample or a complete census, we must contend with the problem of statistical inaccuracy in the results. There are three main types of error to consider:

Unsystematic mistakes, such as those made by man or machine, where the answer, tabulation or measurement is in error. Usually these errors tend to offset each other and do not substantially affect the final results.

Systematic mistakes, such as those which may be biased (done on purpose) or are repeated because of a one-directional error or because the method used in selecting the sample is biased. The extent of these biases must be measured, and controlled where they are relatively important to the problem.

Estimates from samples may always be in error by some amount, simply because they are based on observations included in the sample by chance and the resulting estimates may or may not be equal to the true value. The size of the sampling error can, however, be measured, provided a random (probability) sample has been used.

Another important concept in sampling is usually called the element of risk. Decisions made on the basis of sample estimates may be right or wrong depending upon the reliability of the estimates. The data from the sample plus proper statistical theory provide a basis for quantitatively stating the risk (such as one out of 20 or one out of 100) management is taking of drawing a wrong inference about a given universe. In scientific sampling, the risk can be computed and kept at a very low level; however, there is always some risk, no matter how small, which can be evaluated.

In any office, statistical data can generally be obtained from the people who work for the office (regardless of whether inside or outside), and from office records. In sampling to obtain information, therefore, plans should be made for tapping these sources of data. It is my opinion that any organization can use statistical sampling if:

1. *The office manager has confidence in its potentials.* There prevails a great deal of skepticism among managers toward the idea that probability sampling can accurately reproduce the characteristics of the universe of study. This skepticism can be removed by actual illustrations of the power of sampling, and managers should be open-

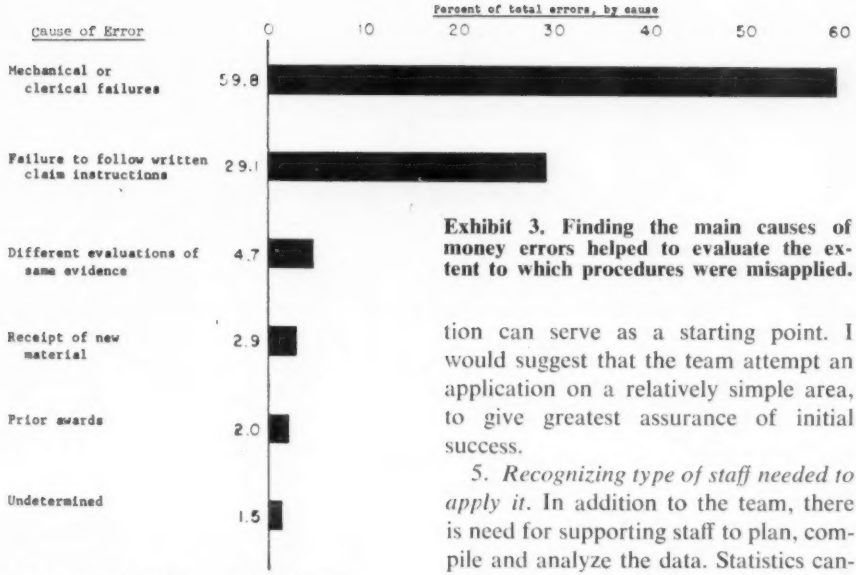


Exhibit 3. Finding the main causes of money errors helped to evaluate the extent to which procedures were misapplied.

minded and willing to be shown.

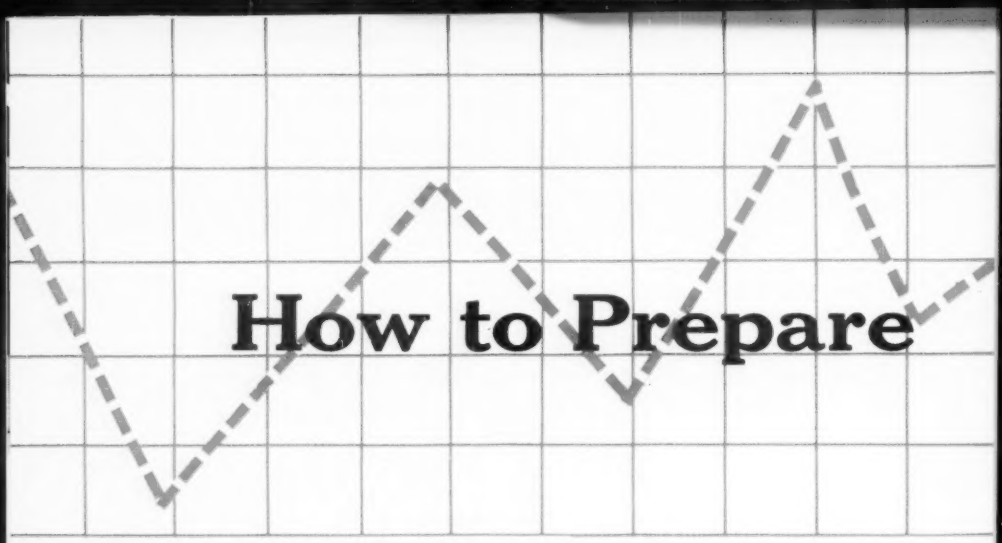
2. *Need for a driving force to break the lethargy of old methods.* Resistance to change is characteristic of human nature. To overcome this resistance requires strong salesmanship. Drive and ability can influence wider applications of statistical sampling. A person, of course, must be first sold on statistical sampling himself and know enough about it to sell it.

3. *Organization of a team.* Often an effective way to overcome the resistance is to organize a team consisting of representatives of management, operations and statistical staff. Thus the interdepartmental or interdivisional cooperation essential to successful applications may be more likely achieved by a team consisting of the manager, the operations man and the statistician.

4. *Need for a start or breakthrough.* Even the smallest successful application can serve as a starting point. I would suggest that the team attempt an application on a relatively simple area, to give greatest assurance of initial success.

5. *Recognizing type of staff needed to apply it.* In addition to the team, there is need for supporting staff to plan, compile and analyze the data. Statistics cannot be compiled and used effectively without a staff skilled in statistical surveys. There are many pitfalls to guard against, as indicated earlier; to avoid these requires a consulting statistician as well as a supporting staff of statistical processors and producers of data. In addition, it is essential that the compiled data be used by management. Thus, management has a major obligation in organizing for statistical sampling and in selecting the area to be studied. Management must guide the types of data to be collected and analyzed; otherwise the most accurate data can lie fallow and be useless.

Scientific statistical sampling is a way of getting facts about complex office operations, facts which are essential to keep the office manager reasonably informed to avoid losing control or becoming a casualty of office complexity.



How to Prepare

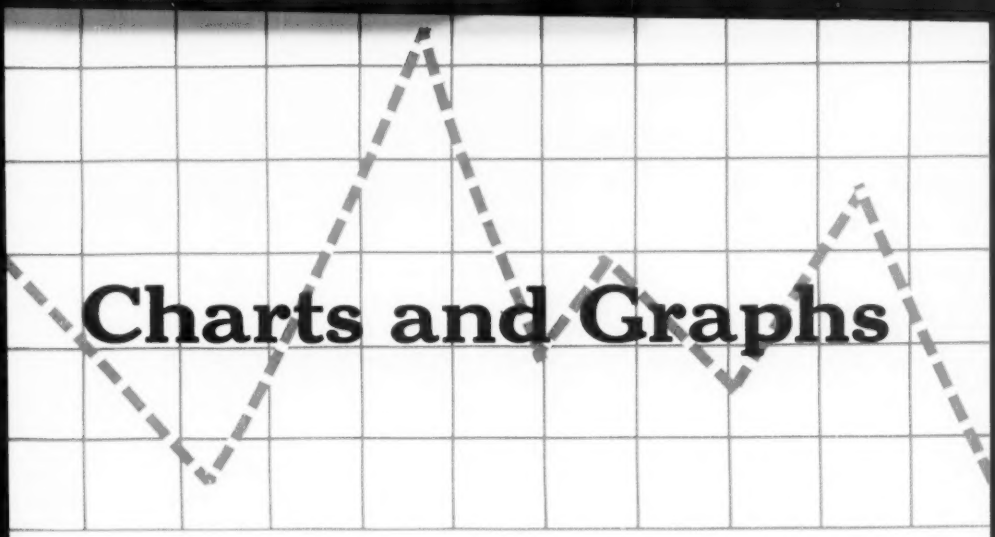
RAY MARIEN, Forms & Procedures Manager,
Olin Mathieson Chemical Corp., New York

HIGH-SPEED COMPUTERS spew forth more data in one day than the average executive can wade through in a year. These statistics enable management to plan better, produce more and sell products faster than ever before—to stay ahead of, or at least on a par with, competition. Statistics are a vital factor in management's decision-making; yet, they cannot be digested properly in the form they assume as they leave the giant brains. They must be presented to management in a concise, graphic manner. They must furnish the essential facts as simply and completely as possible, and they must be seen and studied rapidly.

Time has always been synonymous with money and that was never more true than it is today. To save time and money, many companies have established chart and graph-making departments. Here data is taken from lengthy tables of statistics and converted to easily understood artwork. Much of this work ends up in financial reports to stockholders, most of whom look for simple, easy-to-understand figures. As this type of office operation has gained in importance, many devices and aids have been developed to make this work simpler and more presentable.

The use of black drawing ink in many graphs has been by-passed in favor of black acetate tape in widths as narrow as 1/32″ and as wide as 1″ or 2″. It lays down easily and forms a solid, even black line or bar. It also can be curved in the very narrow widths. Special symbols are available in a variety of patterns and designs to make the chartist's work easier. Colored tapes and acetate sheets in various tints and patterns are also useful for presenting information in a manner that catches the eye.

If the chart is to be photographed for offset reproduction, additional aids are available. Blue-lined grids can be used for layouts. On camera, these blue lines do not photograph, while the black



areas do. This helps to line up job properly and make it easier to obtain precise measurements.

Photo-lettering can be used to produce a more professional effect. This consists of black typographic letters, printed on adhesive or waxed-back acetate, which are peeled off a base sheet and pressed down in place on the graph.

If large size graphs or charts are prepared, not for reproduction but for actual viewing at fairly close range, lettering guides can be used. Incidentally, a skillful freehand letterer or signpainter can work faster and with equally excellent results, but that is becoming a lost art today. The lettering devices are taking over because they can be operated with little practice by any neat person who might lack the artistic skill to do freehand work.

Transparent and opaque color overlays have a virtue that is almost impossible to emulate by hand. They possess an evenness of color and leave no brush marks. A word of caution about color charts. Always be sure to use strongly contrasting colors and beware of hues that mislead the color-blind. It is estimated that more than 10% of the populace suffers from inability to distinguished certain colors from each other. If the person for whom the chart is intended happens to be color blind, use different black-and-white patterns or different patterns in each of the colors.

Color also should be approached hesitantly if a chart is to be photographed later for reproduction. On ortho film, red photographs black and certain pure blues may not photograph at all. To avoid the need for special film and filters, or redoing the job, test your colors on camera first.

Graphs have certain identifiable parts: the X axis, the Y axis, the scale caption, title, coordinate lines and source. These are illustrated in Fig. 1.

Next, there are different kinds of presentations. The more familiar are

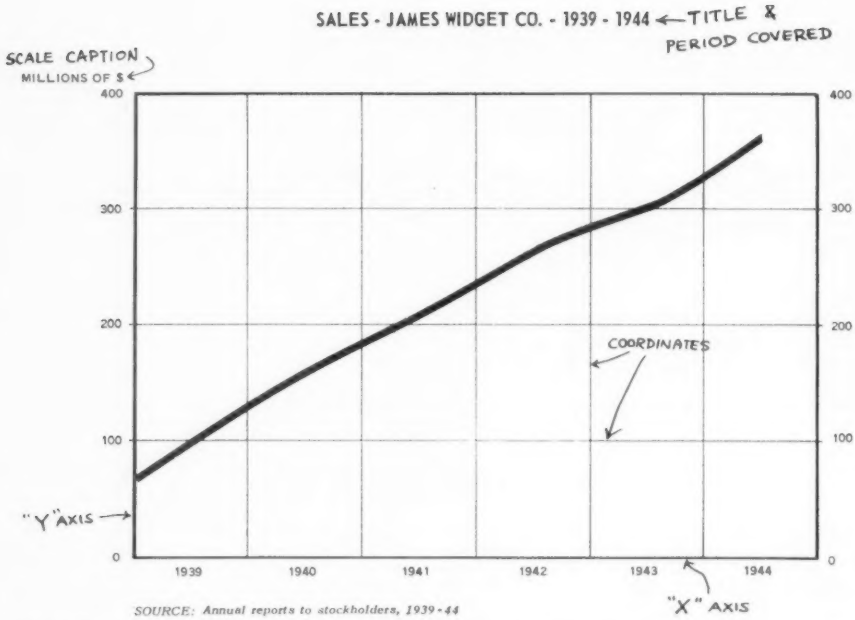


Fig. 1. The basic components of a graph. The one shown above is a time series line graph.

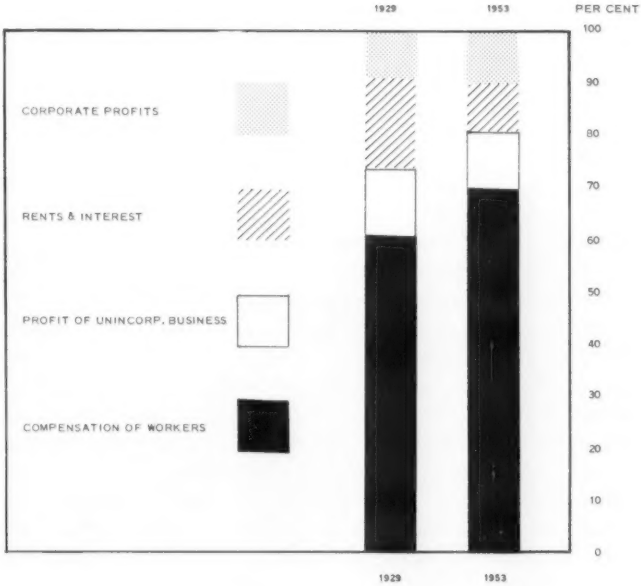
the line (or curve) graph and the bar chart (Fig. 2). Others in common use are pictograms and pie-charts. The latter two have a deficiency, however, which prevents them from being quite as useful as the line graph or bar chart. Their frequent misuse presents a distortion to the eye, rather than a factual visualization of data. In the pictogram, for example, where standing armies of two countries are compared, strings of soldier figures the same size should be used rather than one large figure for each country. By actually comparing units of the same size rather than completely different sizes, a better comparison can be made. The same applies to pie-charts, and here the distortion inherent in comparing two different size wedges is more apparent.

Some other charts used for showing statistical data in graphic form include silhouette, map and pictorial charts, and circular-bar designs. Gantt charts are another type used extensively but they cannot properly be called "displays." When Henry L. Gantt developed the principles of the chart that bears his name, he intended it to be used primarily to present facts in relation to time. Gantt charts are indispensable in scientific management and generally fall into the category of progress charts. For that purpose, they are unexcelled and relatively simple to construct for charting sales quotas, workload plan-

ning, budget comparisons (actual vs. budget), production scheduling and other instances where management seeks to compare actual with projected performance.

Another area which is a source of frequent trouble to the graphic artist occurs when data of two different values are compared. For example, automobile production for the year versus production of one single make. One is measured in millions, while the other may be only in hundred-thousands. To put them on one graph, using a single scale, would mislead the viewer. It is preferable to put them on a semilogarithmic scale setting the higher values on top. The logarithmic scale on the Y axis has the unique advantage of presenting equal ratios as equal amounts; whereas, on the arithmetic scale, an increase in total car production from 10,000,000 to 10,100,000 would be the exact same increase as one from 100,000 to 200,000 in the production of a single make (a 100,000 unit increase). It would thus appear that proportionately things were equal. When these same increases are plotted on a semilog chart, the true ratios are promptly apparent, showing a relative increase of only 1% for all cars as against one of 100% for the given make. Incidentally, if log, or semilog charts are used, it should be remembered that zero cannot be shown: the log of zero is infinity.

Another possible pitfall involves dropping the zero point. Scales on the Y axis should always include the zero



SOURCE: National Income, 1954

Fig. 2. Composite bar graph. The different shadings represent various components of the total. This type of graph is used to show relative weights and respective changes within a single major statistical category.

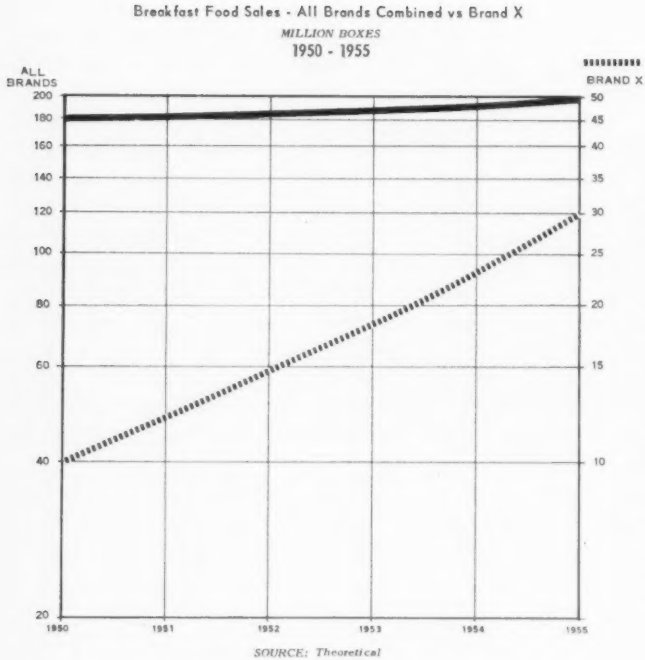


Fig. 3. This demonstrates the advantage of a semilogarithmic graph. Had these figures been plotted on an arithmetic graph, using a single scale, the increase of 20 million boxes in each case would have shown as an equal rise on the graph. But on this semilogarithmetic graph, the relative difference is presented so that we can see the true significance of the increase in Brand X's sales as contrasted to the increase in all brands.

point unless two graphs are being compared side-by-side. Under ordinary graph conditions, where figures are charted from month to month, or year to year, on a time-series basis, omission of the zero point can be seriously misleading. To avoid this, either because of lack of space or clustering of data around certain high levels, scale breaks should be used. Two common types are the complete severing of the chart by means of a double broken line; or breadknife curves which actually do not break, but only serve to show the compression of a scale.

Another confusing situation occurs when an attempt is made to show two separate arithmetic scales on the same graph, one at the left and one at the right. This should be avoided, if possible, in favor of semilog charting.

When drawing up a graph or chart the artist should always consider the possibility of later reproduction. Many times management may decide to run off several hundred copies of a particularly good display. This happens frequently with financial data relating to a company's business. Quite possibly a 30″ x 40″ chart may be reproduced in the firm's house organ, or in some local publication. Perhaps it may even be reduced for inclusion as an exhibit in a standard policy or procedure.

These possibilities have to be borne in mind *before* the artwork is laid out, not afterward. You will want to sidestep the use of light blues, or of colors

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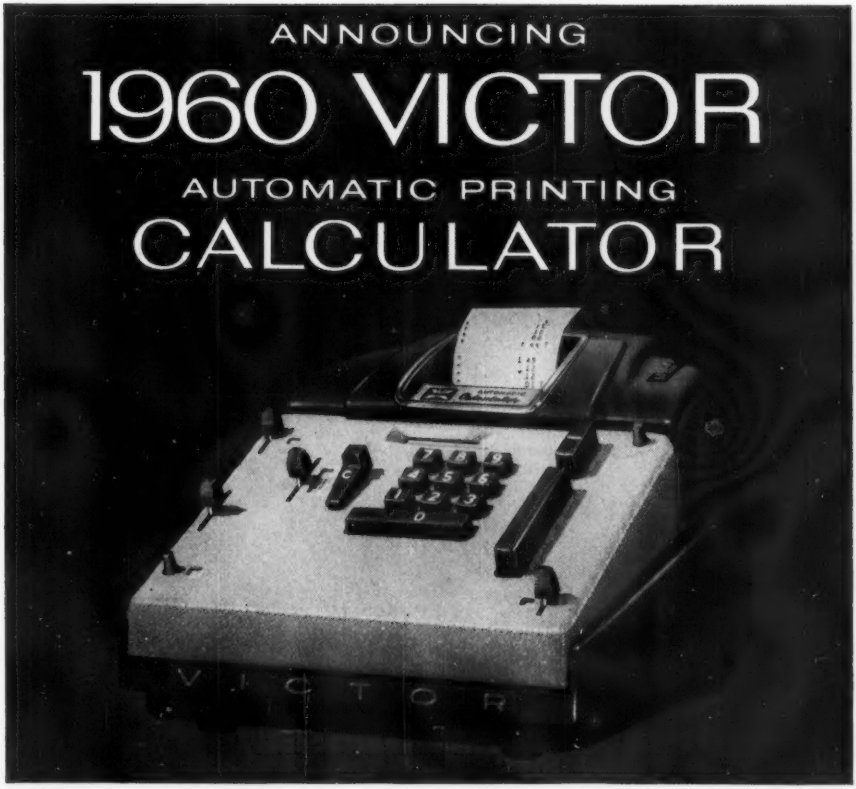

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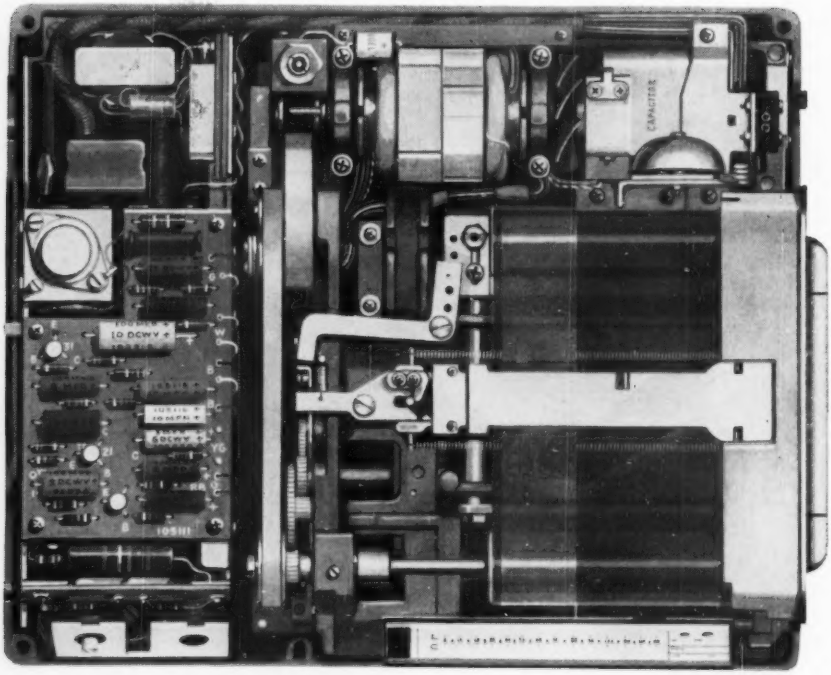

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For More Information Circle No. 214

that photograph similarly, if you expect to have any contrast when the copy is reproduced. Your selection of type sizes and styles will depend on their ultimate appearance after they have been reduced (or blown up) to the final size desired.

Rather than rely on hunches or pure guesswork, use predetermined blow-ups and reductions that show you the actual, finished appearance. Some artists have full lines of various type-sizes and lettering guide styles printed in 10,20,30% and greater reductions so they have an exact idea what the finished result will be.

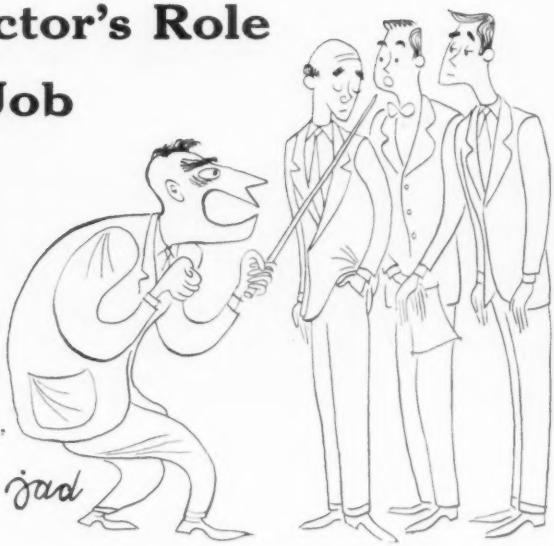
One excellent reference work which is widely used in the field of graphing and charting is "Illustrations for Publication and Projection" (ASA Y15. 1-1959) published by American Society of Mechanical Engineers, 29 West 39th Street, New York 18, $2. It gives step-by-step instructions in graph preparation, legibility and drafting, and includes sample illustrations in different sizes.

There are several other basic rules for charting which the chartist should observe wherever possible:

- Always plot to the midpoints of years on a time-series graph. Data is assumed to be represented at July 1 each year, or the 15th of each month, so place your point at that position before connecting it to the preceding or following year or month.
- Spacing between bars on a bar chart should be no more than one-half the width of the bar.
- Show the scale at both sides of a graph for easier reading.
- Limit comparison of data on one chart to two or three aspects of a set of data.
- Don't try for overfine differences. Charts are used to show *approximate* values.
- Remember that the eye has trouble comparing two-dimensional surfaces, so be wary of pie-chart and pictogram comparisons.
- Use a protractor for accurate computation of pie-chart wedges. A wedge representing 25% of the total pie would be a 90° angle, a 50% wedge would be a 180° angle, etc. (multiply percentage by 3.6).
- Always show the time scale on the X axis in time-series graphs.
- In component bar charts, show the heaviest value at the bottom and proceed up through the lesser values comprising 100% of bar.
- Omit explanatory data from body of graph.
- Use graphs with open grids, not the close ruling found in common, school type graph papers.
- Lay out the graph with the long dimension vertically, if possible.
- Make rulings (curves) much heavier than grid lines, to emphasize curves and avoid confusion.
- Keep scale numbers and titles outside the borders of the grid.
- Concentrate on one single purpose and one main idea for each graph.
- Strive for these three marks of professional competence: *clarity, simplicity, legibility.*

(A helpful book on the foregoing subject is *How to Chart Facts From Figures With Graphs* by Walter E. Weld, Codex Book Co., Norwood 19, Mass., $3.14.—Ed.)

The Instructor's Role In On-the-Job Training



CHARLES V. CRUMB

Training Specialist, International Latex Corp., Dover, Dela.

TEACHERS from universities, colleges and high schools, and instructors from the military services, have found new areas for placement as trainers in industry. By the word "trainer" I do not mean a staff man who sits in the background and offers counsel to a line man who has recognized a training deficiency in the performance of his unit. Nor do I mean a line man who details a new man to a section or an individual to gain the required skill on the job through the hit-or-miss rub-off method. I mean the individual who helps formulate courses, presents the subject matter to the trainees in formal training sessions and finally assists the line man in the follow up. This role is now being played by many relocated teachers.

The object of this article is to help those in industry who have not yet decided how to meet their training needs or who have found their present system unsuccessful. Below we will outline the steps that are required to transform the untrained employees into trained personnel through the use of a professional instructor, trained and experienced in the formulation of training courses, in the techniques of proper presentation and in the evaluation and application of the training he has accomplished.

First, the staff man who recognizes the need for a training course goes to industrial relations where he finds the training director. The training director gets the big picture and then calls in one of his instructors who should have a first hand acquaintance with the training need and what the objectives are in the mind of the line supervisor. This information will help him to choose the

(Continued on page 193)

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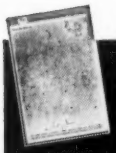

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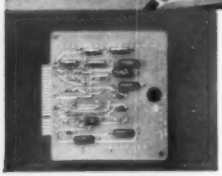

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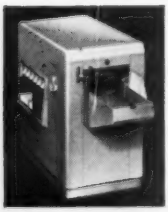

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For More Information Circle No. 221

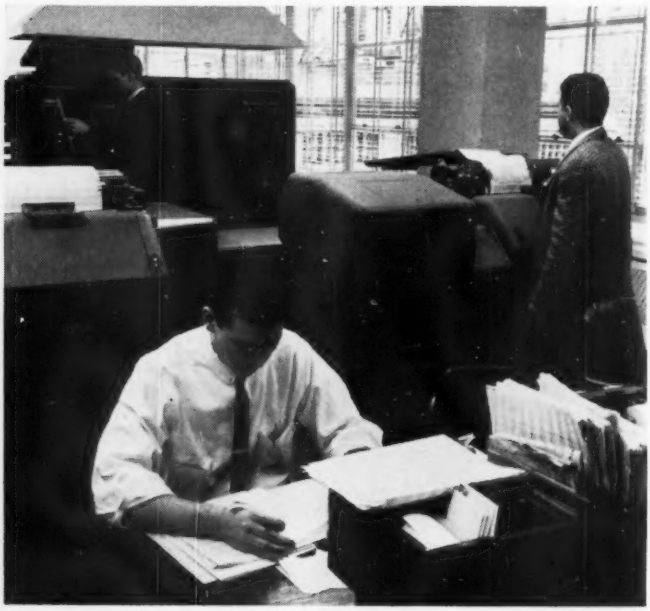
AUTOMATIC SYSTEMS

Current trends in office automation including data processing.

Automated Order Processing In Stock Brokerage Office

ELECTRONIC EQUIPMENT, till now used chiefly by large stock brokerage firms with a national network of branches, is being successfully employed by a medium-sized company: J. R. Williston & Beane. The 70-year-old brokerage business took on a new look last year when Alph C. Beane —former end man of Merrill, Lynch, Pierce, Fenner & Beane—became directing partner.

Recently the firm moved to new modern offices in downtown Manhattan, furnished with such time and labor saving devices as conveyor belts, pneumatic tubes, Remington Rand computer and calculators. Commented Walter Johnson, who supervises the new equipment: "Now that we know what it can do, we are constantly thinking up new jobs for it to tackle—providing data and reports that help us do a better job for



Man at desk in foreground is spot checking tabulated record forms. Univac 120 computer appears at rear left.

Incoming orders to buy and sell securities are received in this office of J. R. Williston & Beane, New York, and order processing begins.

our customers. Through careful planning, we are able to keep the machines going about five hours daily, making most of our jobs easier and, more important, more accurate."

For example, the firm uses its Univac 120 for several types of accuracy checks: (1) between different decks of cards—those of the customer and those from the Stock Exchange; (2) for summarizing and updating master files to be certain the account of each customer is correct; (3) to determine the location of securities in inventory by running cards through the computer; (4) to summarize daily stock records in minutes rather than hours, and (5) to locate misplaced cash as every receipt and disbursement must be identified by account number.

"In our business," says Johnson, "we are always accountable for every share of stock—to the Exchange as well as to our clients. When you handle thousands of different securities for thousands of different customers, you have to have frequent checks."

Here is how the firm handles orders

Order slips are checked and routed via conveyor belt to clerks handling various Exchanges where securities are traded.

After execution, orders go via pneumatic tube to sales and purchase department where order ticket is matched with transaction report from Exchange floor.

Small, convenient Magne-Dex trays house tabulating cards in the key punch section.

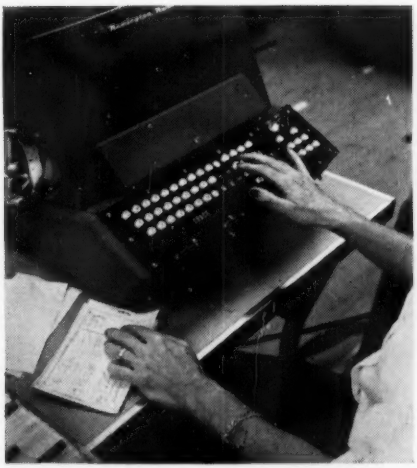
from the moment they are received by one of its registered representatives. A Lamson conveyor belt picks up the orders to buy or sell and carries them to the order room for processing. This enables the representative to stay at his desk and still maintain written communication with all service departments. Under the old system, account men had to deliver orders personally.

Order slips are checked and routed to clerks handling the various Exchanges on which the securities are traded. Then the orders go by pneumatic tube to the purchase and sales department. Here each one is checked for accuracy by matching the order ticket to the report of the transaction received from the floor of the Exchange.

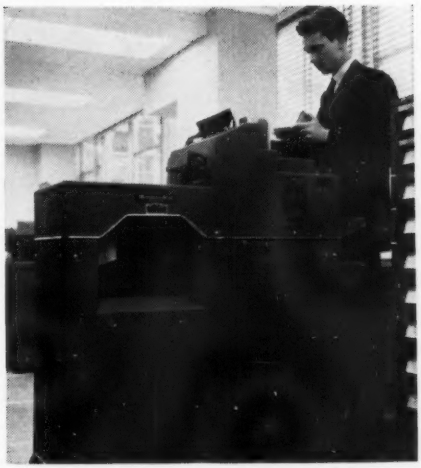
Next stage is the key punch section where operators prepare punched cards. In this department the firm has replaced its tub files with small, convenient Magne-Dex file trays. Phase five entails punching variable data on a Card-O-Matic. Operators punch such data as quantity, price and account number. Name of the security and processing codes are entered automatically from a master.

The Univac checks the accuracy of the cards. Punched cards are collected periodically and processed in the computer. Buyer and seller cards are matched, *e.g.*, if the customer's record showed a purchase of 90 shares of U.S. Steel and the broker's card recorded 900, the computer would catch the error. Previously, it would have taken a clerk hours, maybe even days, to find the mistake.

The computer is also used to interfile transaction cards with name and address cards so transactions can be



Quantity, price and account number are key punched. Security and processing codes are punched automatically from master card.



At day's end, collator interfiles transaction cards with name and address cards for the subsequent machine posting to accounts.

credited or debited to the correct account. But hands are still needed for some jobs, and clerical workers check through paperwork occasionally to make absolutely certain that accounts are being credited properly.

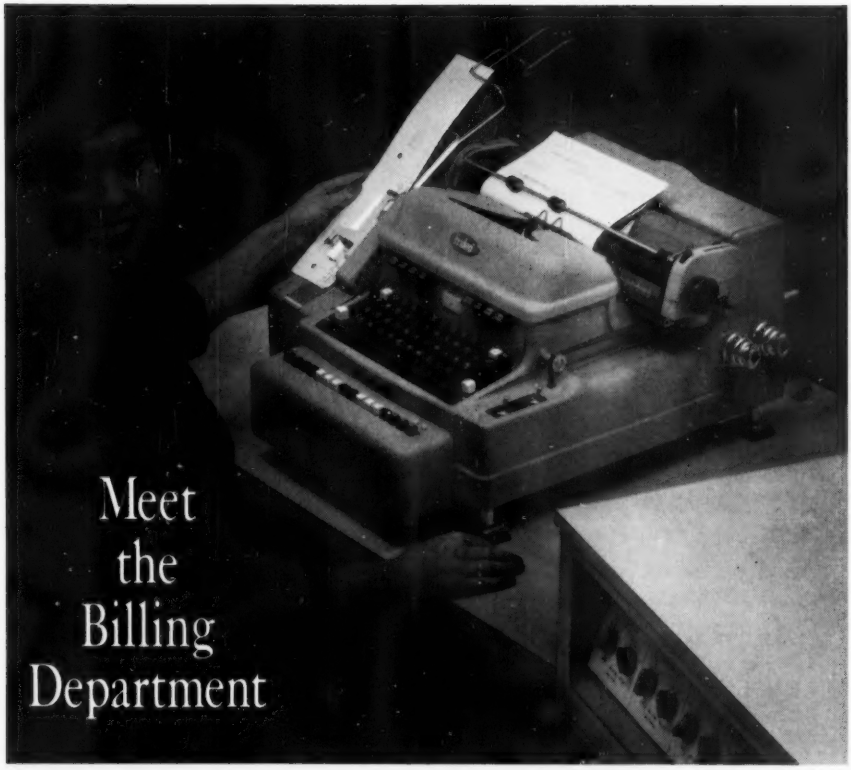
Cards are processed by computer periodically to check accuracy and make further calculations. Machine compares commissions and taxes; shows net amount due customer or broker. If customer's record showed a purchase of 90 shares and broker's card recorded 900, error would be caught here.

Packard Bell's 250 Computer

THE PB 250, a high-speed general purpose, digital computer, was announced by Packard Bell Computer Corp., Los Angeles. It combines a large, expandable memory and a versatile command structure with computing speed in the microsecond range, yet is priced at $30,000.

Specifications of the PB 250 qualify it for either on- or off-line applications as an engineer's desk-side computer or an on-line computer for process monitoring, process control, data logging and alarm generation. It is a serial, binary, single-address computer with an internally stored program. Its microsecond speed for add/subtract is 12 usec; multiply, 276 usec; divide/square root, 252 usec. These times are for a word of 21 bits plus sign. Floating point operations with a 37-bit mantissa and a 7-bit characteristic require less than 3 milliseconds. Memory of 1808 words is expandable to 15,888 words internally, with additional 16,384 words of core memory available. Computer takes 46 commands including double precision operations, block transfer, Gray to binary conversion. Simple programing is achieved by single-address instructions, command indexing and automatic double precision operations. Input-output equipment includes high-speed tape readers and punches, magnetic tape units, card readers and punches, printers, analog-to-digital and digital-to-analog converters. Standard equipment includes automatic typewriter with paper tape reader, and punch. Reliability is maintained through conservative solid-state design, small component count and absence of moving parts. All memory operations are parity checked. **For More Information Circle No. 101.**

Packard Bell's 250 computer can be programed to check its own operation and monitor the operations of the remainder of the system. It costs $30,000.



This is a Friden CTS Computyper. The girl who runs it can turn out an amazing number of invoices and still have one of the easiest jobs in the office. Together, she and machine comprise a complete billing department.

Utilizing edge-punched cards which contain constant data, the CTS writes the heading and line items at a speed of 100 words per minute. It stops automatically to let the operator fill in order number and item quantity. Extensions, discounts, tax computations, and totals are figured and typed on the invoice automatically. Grand totals, stored in the machine, may be printed at any time.

As the invoices are prepared, the CTS automatically punches selected information into a by-product paper tape for subsequent data processing such as direct conversion to tab cards. Or, the CTS can directly control card punching as *another* automatic by-product.

We call this PRACTIMATION: automation so hand-in-hand with practicality there can be no other word for it. Call your Friden Systems Man or write: Friden, Inc., San Leandro, California.

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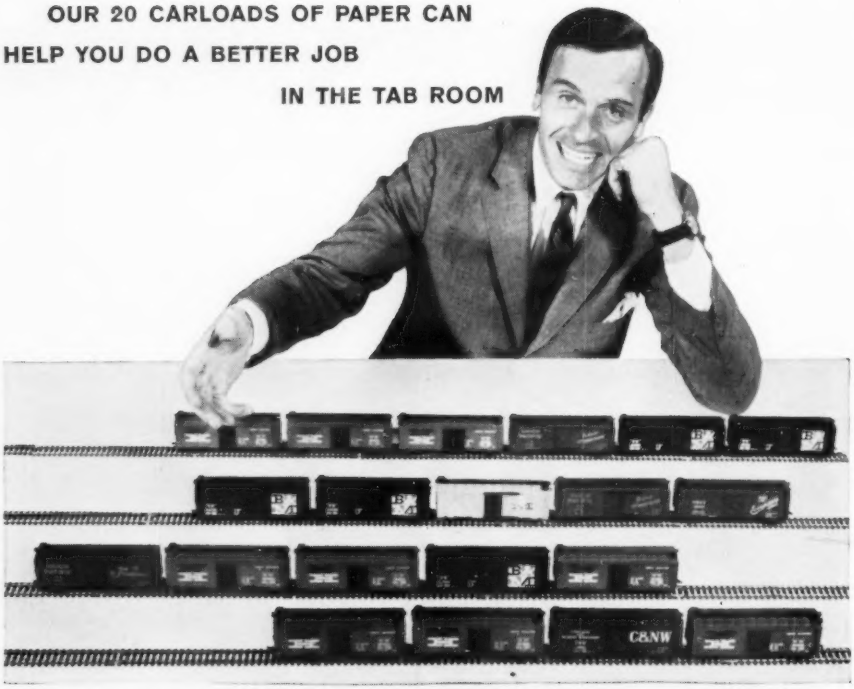
OUR 20 CARLOADS OF PAPER CAN HELP YOU DO A BETTER JOB IN THE TAB ROOM



HERE'S HOW

Having the *right* paper for your data processing forms is basic for trouble-free tab room operation. And when you order GC Forms, you can choose exactly the paper required.

We keep *20 carloads of paper* on hand at all times, specially-made forms paper which gives you maximum smoothness, legibility, printability, opacity and resistance to tear.

First, what *variety* of paper do you need? Choose from bond, ledger, index, safety, multicopy masters, or NCR. Bond is most universally used, but your application might warrant *ledger* which is ideal for accounting pages, *index* for requisition blanks, *safety* for checks, or *multicopy masters* for reproducing many copies of orders. And, of course, when you omit carbons from your forms — *NCR!*

Second, *what weight?* Before you decide, we'll ask you : On what equipment will forms be used? Number of copies? Method of handling? How filed? Pen or pencil writing? For internal or external use, or both? Your answers to these questions help our forms design specialists decide which form paper will be right *and* most economical for you.

Third, what *color?* In our 20 carloads we have paper in white and seven colors. Pick the color you like or set up an easy color-coding plan for distributing forms copies.

Would you like some samples of GC Data Processing Forms printed on different types of paper? Drop us a line at the address below and we'll be happy to send them to you immediately.

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For More Information Circle No. 217

Some Trends in the Hiring of College Graduates

ALTHOUGH COMPANIES which actively recruit personnel on college campuses will seek about 19% more graduates from 1960 classes than they employed from classes of 1959, fewer will be sought in the office management and personnel categories while most other groups, including accounting, will increase (see Table 1). This was indicated in the results of a survey of 211 firms in 26 states, according to Frank S. Endicott, director of placement at Northwestern University and reported by the Division of Manpower & Employment Statistics of the U. S. Dept. of Labor in its *Occupational Outlook Quarterly*.

Despite the increase in demand (19%), the number of bachelors' degrees granted by institutions of higher learning this year is expected to rise only 7-8%. Interest continues in the employment of liberal arts graduates but a relatively small proportion of them actively seek business positions. Starting salaries will be higher this year, continuing the upward trend apparent for many years. The salary differential in favor of engineering graduates over general business graduates (male)

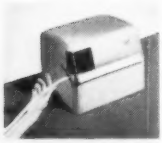
Field	Number hired from graduating classes of	
	1959	1960 (Estimated)
All fields	14,511	17,259
Engineering	6,212	7,396
Mechanical	967	1,234
Industrial	238	356
Electrical	1,148	1,656
Chemical	343	449
Civil	85	97
Metallurgical	83	140
Other	592	523
Not specified	2,756	2,941
Other fields	8,299	9,863
Accounting	1,514	1,804
Advertising	145	155
Chemistry	421	604
Economics	76	79
Finance	88	96
General business (trainee program)	2,149	2,354
Insurance	124	97
Law	38	25
Market research	29	41
Marketing	118	167
Merchandising	109	135
Office management	41	30
Personnel	92	72
Physics	159	272
Production management	396	527
Sales	1,180	1,460
Statistics, mathematics	76	89
Time and motion study	45	42
Transportation, traffic	23	18
Other	594	734
Not specified	882	1,062

Table 1. Employment by 211 firms of college graduates in 1959 and estimated employment from 1960 classes.

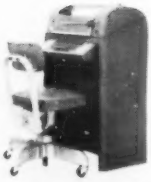
Class of--	Number of companies reporting	Percent of graduates	
		Still employed	Leaving company during first few years
1954	150	64	36
1956	171	68	32
1958	195	88	12

Table 2. Turnover of men graduates (excludes those who left their jobs to enter military service).

FREE LITERATURE:
Write for Model 28 "Complete Product Line" brochure to Teletype Corporation, Dept. 34G 4100 Fullerton Ave., Chicago 39, Illinois.


Typing Tape Punch

Tape Reader


Send-Receive Page Printer

Automatic Send-Receive Set

For More Information Circle No. 228

Mechanize words to lower paperwork costs

Teletype tape reading and punching equipment offers a direct method of reducing paperwork costs by saving time—mechanizing such functions as:

- *Sending information* from one office to another, between plants, across country, even overseas. The Teletype Model 28 tape reader (left) will transmit to one destination, or to many destinations simultaneously.
- *Recording and storing* data in tape. The Teletype Model 28 punch (right) will produce tape as a by-product of send-receive operations or it can be used to combine data from several sources in one tape.
- *Repeating fixed data* such as addresses, invoice information and other reusable data, is a tape specialty.

The Teletype tape reader and tape punch may be used individually or in combination with other Teletype equipment. These units are compatible with existing communications facilities. They are also compatible with many business machines, to further extend their usefulness and cost-saving potential.

Teletype Corporation manufactures this equipment for the Bell System and others who require the finest in data communications.

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SUBSIDIARY OF *Western Electric Company* INC.

For More Information Circle No. 228

Reasons reported by companies	Number of companies reporting
Wanted to take position in another field	72
Wanted more pay	64
Geographic location; preferred to live elsewhere	63
Not qualified; did not meet standards	63
Wanted more responsibility, more opportunity	52
Returned to graduate school	32
Advancement too slow	25

Table 3. Most common reasons why recent men college graduates left their jobs.

will increase. The companies reported they offer at least $80 a month more, on the average, to engineers than to general business graduates. In 1955, the differential was only about $32.

Of interest in this survey were the reasons why the typical company loses about 36% of its new college men by the end of the fifth year of employment (see Table 3). A list of suggestions for the reduction of this turnover was provided by the reporting companies (Table 4).

The list of shortcomings which com-

Suggestion as stated by the company	Number of companies reporting
Provide more interesting responsibilities and challenging assignments	62
Regular appraisal and recognition of achievement	55
Well-planned training program	49
Honest portrayal of promotional opportunities before hiring	39
Personal interest, attention, and counseling	33
More careful screening	30
Pay adequate salary	26

Table 4. Suggested methods of reducing turnover among graduates.

THE NEWEST CALCULATOR HAS ONLY 10 KEYS!

No manual calculator offers more than the

ALL-NEW FACIT CM2-16

■ 3-row "standard" keyboard ■ 16 digit capacity ■ Back transfer lets you multiply continuously without resetting ■ You can see and check all figures set ■ Precision-made to famous exclusive Facit calculating machine standards ■ Feather-light touch ■ Silent operation ■ Dustproof ■ All for $225. Write for all the facts today.

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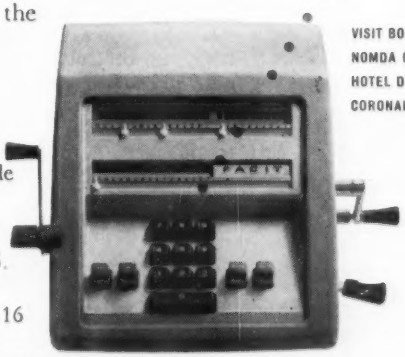

VISIT BOOTHS—37, 38
NOMDA CONVENTION
HOTEL DEL CORONADO
CORONADO, CALIFORNI

For More Information Circle No. 397

Shortcomings as indicated by the companies	Number of companies reporting
Overemphasis on management positions; expect too much too soon...	68
Unrealistic idea of what is expected in business.....	48
Lack of ability to write clearly and concisely.....	46
Inability to speak effectively.....	45
Lack of specific goals; failure to determine what they want to do	23
Failure to recognize the value of experience and on-the-job training.....	19
Immaturity; poor social judgment.....	16
Unrealistic appraisal of their own abilities.....	12
Overemphasis on salary and benefits.....	7
Lack of motivation and drive.....	6

Table 5. Shortcomings of inexperienced men college graduates.

panies found among newly employed college graduates appears in Table 5. Companies almost unanimously rated extracurricular activities important in contributing to the all-round development of the student. There was also general agreement that college entrance standards should be neither too demanding for the average student nor so low that very few would fail.

Filing Has Its Ups and Downs

IT IS CUSTOMARY for clerks in our records department to write, "Too high," on requisitions for new, numbered records which have not yet been received. One day we received a call from a requisitioner who said, "I know what 'too high' means, but my last requisition was returned marked 'too low'." We asked him to return it to us and then took it to the clerk who originated the "too low" category. She explained, "I hurt myself roller skating last week. The records requested were in a bottom file drawer, too low for me to bend down to."—*Jay J. Melcer, Prudential Insurance Co. of America, Newark, N. J.*

THE OFFICE pays $25 for true, unpublished anecdotes from readers. Address: Anecdote Editor, THE OFFICE, 232 Madison Ave., New York 16, N. Y.

Recordak announces the new RELIANT 500 Microfilmer

Here's the fastest, most versatile microfilmer ever built . . . and *only half the size* you'd expect a large-volume microfilmer to be!

In one minute it photographs up to 500 items . . . indexes them on the film . . . also endorses or cancels them when accessory endorser is used.

New Reliant 500 Microfilmer makes your operator's job unbelievably easy and trouble-free. For example, she simply slides out the film unit to load film or to substitute a film unit with a different reduction ratio (40 to 1, 32 to 1, 24 to 1). This "instant change-over" also makes it practical for various departments to microfilm with their own film units—unitizing their work, and reducing need for extra microfilmers.

Its fresh, new styling reflects in still another way Recordak's thirty-three years of microfilming leadership.

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Send free 4-color folder describing new RECORDAK RELIANT 500 Microfilmer.

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For More Information Circle No. 281

How to Make Effective Use of Ideas

The eleventh in a series of articles by Harry L. Wylie, Assistant Secretary-Treasurer, Pure Oil Co., Chicago, covering the basic office functions and showing how office methods can be improved—especially in medium size and smaller companies.

SEVERAL FACTORS influence the development of methodology and create the environment in which employees work. Some of these have been covered in previous articles in this series, particularly those that deal with the use of space, machines, materials, supplies, time and people. There is an additional factor which touches upon management's attitude toward "ideas." Management's receptiveness to ideas is much like a radio receiver which either operates on a crystal controlled band, receiving only that which is broadcast on a specific wave length—or it operates on a wide band allowing variable tuning to bring in a variety of items. Sometimes people who run companies become enchanted with one area—they see only sales, or engineering, or finance, or manufacturing. They tune to a specific field of interest and are alert to suggestions in that field, but show little, if any, enthusiasm for other fields.

Top management people should be generalists to balance all segments of a company, spurring one, holding back the enthusiasms of another, coordinating the activities of a variety of temperaments to produce a united and integrated whole. An enterprise develops by and through its people, and the ideas they created. A criterion of appraisal of a company's awareness of ideas is its degree of participation in public affairs (trade associations, professional groups, commercial associations, charitable and educational activities). Ideas are usually fostered in an environment which has as few restraints as practical considering the need for policy, authority and responsibility. No organization can be turned loose to engage in whatever fancy might appeal to its personnel, nor can all the employees be directed toward unquestioned execution of assignments. There is that small, but effective, segment of personnel that wants to know *why* they perform certain operations. So that this discussion will be practical, the suggestions for effective use of ideas pertains to employees who develop their creative activities in areas in which they have knowledge and responsibilities. It is not intended to include the brainstorming technique.

1. *Work simplification encourages inspection of methods.* Work simplification programs contemplate participation of the employees in all studies of methods improvement as opposed to methods analysis which is usually done by trained methods engineers. Effective *use* of ideas makes management's willingness to review (with an open mind) at least ten ideas to get one good one. The key to *creating* ideas will be found in employee participation at their re-

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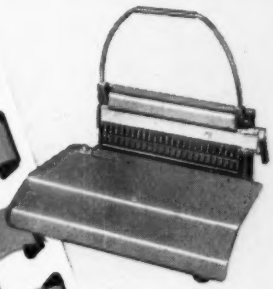

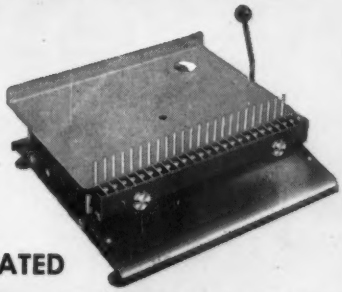

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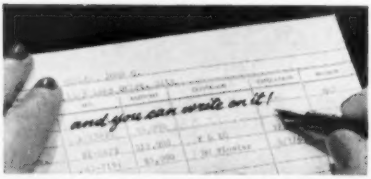
For More Information Circle No. 380

For mending, this tape makes a hit because...you can write over it!

Type over it; write on it with pencil, ballpoint, or regular pen. There's absolutely nothing like this Magic Mending Tape. It disappears on paper like—well, like magic. Sticks tight, stays clear, won't curl, peel or discolor—ever! Available at stationers everywhere!

Mends paper permanently. "SCOTCH" BRAND Magic Mending Tape stays clear, never yellows or gets sticky, lasts as long as the paper it mends. Ideal for repairing documents, book pages, all office records.

Mends invisibly. You won't believe your eyes! This tape disappears when it touches paper. It has a matte-finish that doesn't shine. Safe for use in copying machines too—won't opaque.



And — you can write on it! Takes any writing without a skip. Perfect for splicing in revisions and adding attachments.

Ask your office supplier for "SCOTCH" BRAND No. 810 Magic Mending Tape (fits standard desk dispensers). Write for free booklet about all the handy "SCOTCH" BRAND Tapes for office use. Address: Dept. CAQ-70, 3M Company, St. Paul 6, Minn.

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...WHERE RESEARCH IS THE KEY TO TOMORROW

For More Information Circle No. 306

spective work areas.

A kindergarten teacher, recognizing the various degrees of skill and muscular coordination of her young charges, refrained from commenting favorably or unfavorably lest she discourage the least capable. She assumed, as many in industry do, that performance is its own reward and that recognition defeats effort. She discovered, however, that her students' performance was decreasing rather than improving with practice. She was informed by an educational authority that her approach discouraged the competitive urge to improve. Mediocrity became the standard. The children saw no objective beyond the short-lived personal interest in the activity. Then the teacher decided to hang *all* drawings around the room. One boy who turned in the worst jobs of coloring showed remarkable improvement (as did others) on the next drawing. He pointed to his badly executed piece and said, "Oh, I can do better than that." Most employees can, too!

Work simplification gives all an opportunity to display their ability and spurs a larger number to constructive analysis of their tasks. When employees are left to their personal ingenuity, day-to-day routine makes it impossible for most to do anything other than keep up with their work. When employees are provided the time for analyzing their jobs as part of an organized program, many will come up with practical suggestions. Just ask, "What do you think?" Work simplification *asks*—it doesn't just *tell*.

2. *Job analysis can be used for reporting employees' suggestions and*

(Continued on page 206)

"$3,700 a year! That's what our $2,190 Monroe Accounting Machine saves in accounting costs," says Bruno F. Farinelli, President, Bromley Fuel Service Co., Trenton, N. J. "This money provides new pumping apparatus so that we can load our trucks 3 times faster. Also, our Monroe automatically forecasts each customer's next delivery date by degree days as it prepares his statement." Why not give your business a boost with Monroe Machine Accounting? As little as $750 buys it!

***That's what you'll call your Monroe Accounting Machine.** It saves money by lowering costs; makes money by freeing capital to grow on.

FREE CASE HISTORIES

Learn how Monroe Machine Accounting earns more growth money for companies like yours.

Write: Accounting Machine, Dept. 16, Monroe Calculating Machine Co., Orange, New Jersey.

See the MAN from MONROE

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Monroe Calculating Machine Company, Inc. Sales and service in principal cities everywhere. General offices, Orange, N.J.

For More Information Circle No. 256

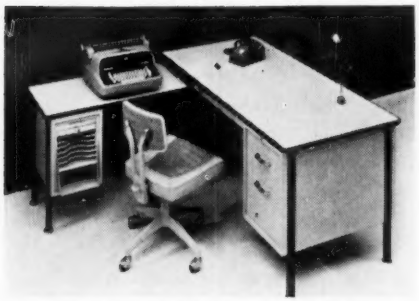
A New Furniture Line

FLEXIBILITY of components which may be assembled in almost unlimited variations, and a wide range of decorator colors, are among the features of the 4000 Line of metal furniture introduced by All-Steel Equipment, Inc., Aurora, Ill. The line consists of 75 basic units: executive, secretarial and clerical desks along with executive and clerical L-units, credenzas, bookcases, storage units, work and conference tables. Saddle seating is a feature of the 1600 and 1800 lines of chairs introduced with the 4000 Line. Chairs are upholstered in fabrics, leathers or Naugahydes, with foam rubber cushioning.

More than 50 different drawers and shelf pedestal variables, in three depths, are provided. All drawer pedestals have center locks for assembly on either the right or left sides, and have pull-out dictation shelf. Center drawers are available in all desks.

Tops come in five widths: 18″, 24″, 30″, 36″ and 42″ and lengths from 24″ to 120″ in a wide range of laminate coverings or, on special quotation, in hand-rubbed oil finish wood and other materials. Tops have either the resilient, protective Styledge moldings or are self-edged. The standard colors have been broadened to 13 in the new line, to include turquoise, teal blue, coral and cherry, along with sea gray, dawn gray, ebony, mojave tan, stylite tan, bronze tan, nile green, mist green and surf green.

An executive office with ASE's 4000 Line.



One of the 4000 Line secretarial groups.

Included in the wide range of accessories adding to the efficiency and completeness of the 4000 Line are partitions for box and tray drawers; sliding convenience trays for box drawers; sliding letter trays for box drawers; coin and bill tray; cross file inserts for hanging file folders; a pull-out machine shelf for 18″ shelf pedestals; stationery racks with five compartments for box drawers; recessed dictation shelves; lift-out card trays for 3″ x 5″ and 4″ x 6″ cards, and rubber feet.

Leg sets for the line are available in matching or contrasting finishes, or brushed chrome. While standard leg mounting is outside the pedestal, island legs, centered under the pedestal, can be provided. For illustrated Catalog CD-1 with full information, **Circle No. 170.**

J. B. Kobak

Wright Patman

V. L. Kennedy

Among the speakers on NOMDA's convention program.

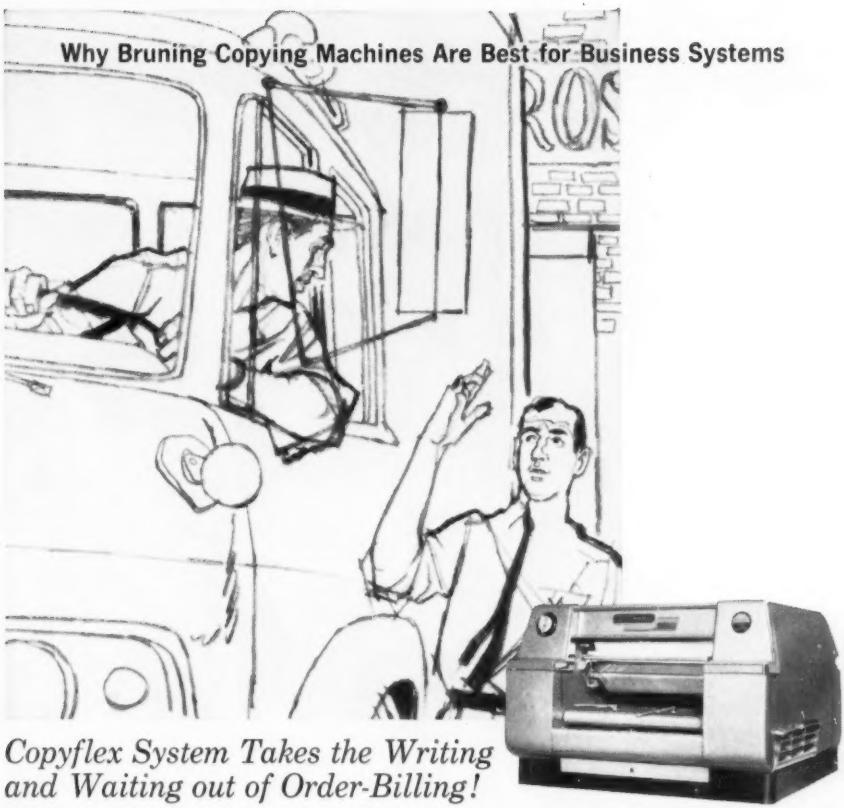
Office Machine Distributors To Hold Annual Convention In California This Month

INDICATIONS are that this year's International Convention and Trade Exhibit of the National Office Machine Dealers Assn. will top all records. Set for July 10-13 at the Hotel del Coronado, Coronado, Calif., NOMDA's 35th convention will present a number of new panel discussions that will advance many fresh points of view.

One of the country's great champions of the small business, the Hon. Wright Patman, Texas Congressman and co-author of the Robinson-Patman Act, will be the principal speaker on the opening day. This will be followed by the unveiling and distribution to registrants at the convention of the *Profit Primer*, prepared by J. K. Lasser & Co., New York accounting firm, as an aid to dealers. The firm drew up a set of record keeping sheets to make it easier for office machine dealers to have proper data constantly at their fingertips as to the status of their business in any given month. Speaker at the event and in charge of the presentation will be James B. Kobak, Lasser partner.

V. L. Kennedy of San Jose, Calif., will head the panel discussion on Tuesday, July 12, on advertising. He will be

Why Bruning Copying Machines Are Best for Business Systems



Copyflex System Takes the Writing and Waiting out of Order-Billing!

One writing does it for *any type* order-billing operation when you use flexible Bruning Copyflex copying machines. You eliminate clerical rewriting and retyping, get shipments and invoices to customers, days earlier!

Key to Copyflex flexibility is the orignial translucent order form. This can be a preprinted single sheet or a part of a snap-out or continuous form. On this original order form, data can be added or changed as necessary and copies made at any point to serve as shipping copies, stock-picking copies, factory orders, and finally invoices. For multiple shipments, reproducible copies can be made of the original to serve as "originals" for reproduction of as many sets of shipping, production, and invoice copies as necessary.

Ideal for business operations, Copyflex gives you sharp, black-on-white copies (or color coded) . . . at only a penny each for materials for letter size! Why wait when you can put an end to costly writing and waiting in your company by mailing the coupon now.

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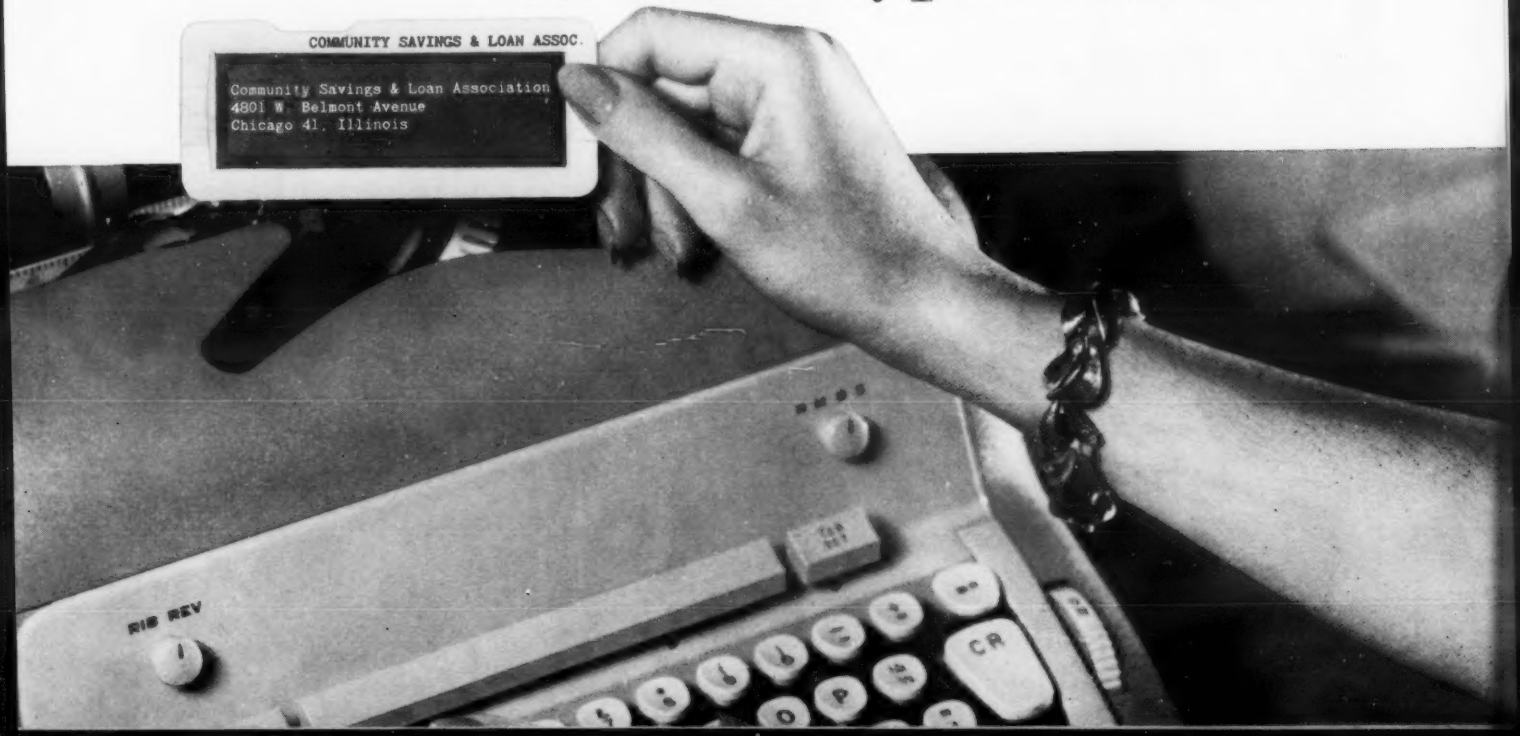
For More Information Circle No. 284

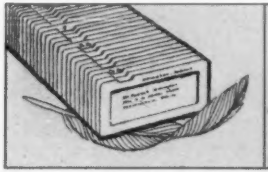
Anyone can type it on ANY typewriter . . .



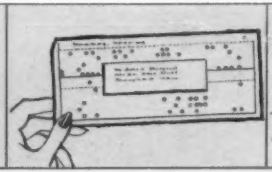
. . . the Elliott addressing stencil is that easy to make

YOU SEE, YOU DON'T NEED ANY SPECIAL EQUIPMENT to make the famous featherlight Elliott addressing stencil—a mere typewriter fills the bill. Anyone who can type at all can make these stencils, no fuss, no complications. And they cost only 2½¢ apiece as against the 8¢ of heavy, clumsy metal plates. They're so light that whole trays are easy to carry, never tire the operator. All makes for efficiency.

And there's an Elliott addressing system for every size mailing list, from hundreds to millions, a system for addressing small size cards or mammoth broadsides and everything in between.



LIGHTWEIGHT — *whole tray of 125 stencils weighs only 8 ounces.*



MAXIMUM SELECTIVITY: *Your Elliott can automatically imprint specially chosen names for any special job. Hundreds of selective addressings.*

TYPEWRITEABLE — *anyone who can run a typewriter can make Elliott stencils.*

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35,000,000 Americans moved last year. The Elliott Addressing System easily keeps pace with your ever-changing mailing lists.

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143 Albany St., Dept. O-70. Cambridge, Mass.

Please send me information about the cost-saving Elliott Addressing System suited to my size mailing list, which is .....

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Company _____

Type of Business _____

Street & No. _____

City _____ **Zone** ____ **State** _____

For More Information Circle No. 400

NOMDA Convention Program

SUNDAY, JULY 10

9 a.m. Manufacturer, Wholesaler and Distributor Registration.
10 a.m. Dealer Registration.
10 a.m. to 9 p.m. Exhibits Open.
1:30 p.m. Board of Directors Meeting.

MONDAY, JULY 11

9 a.m. to Noon Exhibits Open.
1:45 p.m. Hon. Wright Patman, Texarkana, Texas.
2:30 p.m. James B. Kobak, J. K. Lasser & Co., New York.
8:30 p.m. "Biff Bender Makes a Buck" presented by the Southern California OMDA.

TUESDAY, JULY 12

9 a.m. to Noon Exhibits Open.
9 a.m. Display of Award Winning Advertising Ideas.
1:30 p.m. Business Meeting and Election of Officers.
2:15 p.m. Advertising Panel: V. L. Kennedy, San Jose, Calif.; Thomas Faust, San Jose, Calif.

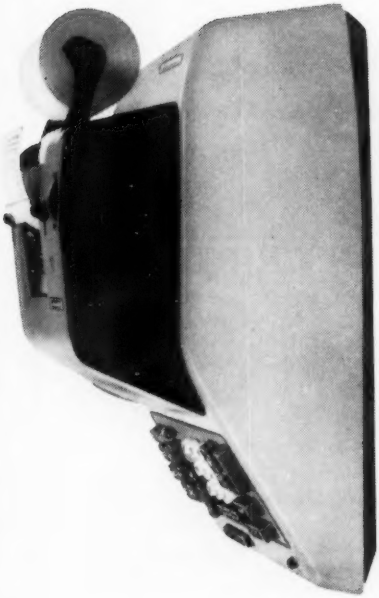
WEDNESDAY, JULY 13

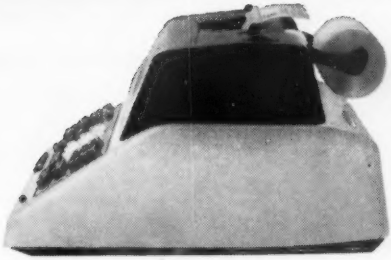
8:30 a.m. President's Breakfast and Workshop for Local Association Officers.
9 a.m. to Noon Exhibits Open.
1:30 p.m. Presentation of Awards and Prizes.
2:30 p.m. Automation Panel: William Lennartson, Chicago.
7 p.m. Annual Banquet, Entertainment and Dance.

assisted by Thomas Faust, Long Advertising Co., San Jose, a company that has been in the office machine advertising field for several years. Mr. Kennedy is a member of the NOMDA executive committee.

Alfred H. Foxcroft, NOMDA president, will preside over the annual workshop following the president's breakfast on Wednesday, July 13. This is the second such event, following the success of the first in Cincinnati last year. Chief topic for discussion will be programing. Other items on the agenda will be record keeping, collection of dues, attracting nonmembers to meetings, staging meetings and the various activities that can be adopted by locals to further NOMDA aims.

The convention will also hear of the tremendous sales possibilities inherent in automation as applied to office machine dealers. The convention is open to both members and nonmembers of NOMDA and complete information can be had from National Office Machine Dealers Assn., 1542 Hillhurst Ave., Los Angeles 27, Calif.

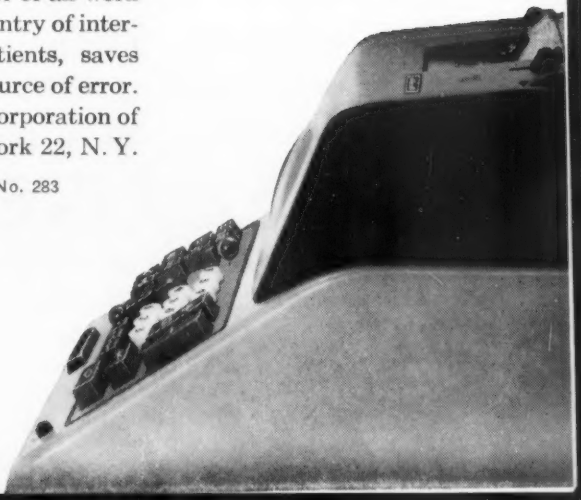


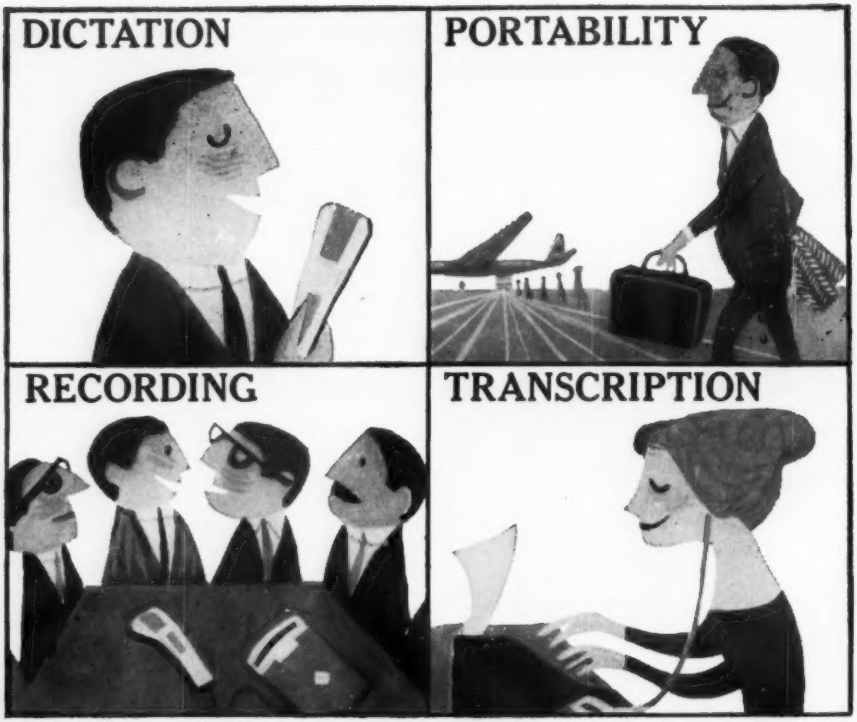


olivetti

The Olivetti Divisumma 24, a high-speed calculator that can also be used as a high-capacity adding machine, combines the several parts of a figurework problem into one running calculation, and provides printed proof of all work for easy checking. Automatic re-entry of intermediate results, including quotients, saves time and eliminates a common source of error. For information, write Olivetti Corporation of America, 375 Park Ave., New York 22, N. Y.

For More Information Circle No. 283





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For further information write: INTER-CONTINENTAL TRADING CORPORATION, 90 West St., New York 6, N. Y.

For More Information Circle No. 242

RIGHT or WRONG in Employee Relations

A ROUND-UP of day-to-day employee problems and how they were handled by management. Each incident is taken from a true-life grievance which went to arbitration. Names of some principals have been changed.

Can Management Change the Coffee Break Procedure?

What Happened:

For three years the employees were allowed two coffee breaks a day—one in the morning and the other in the afternoon. At each break the workers left their desks. As time went on, many abuses developed. The most serious problem was that of returning to desks late. So management decided to cut out the coffee break. Instead it substituted perambulating service so that employees could get their coffee at their work stations. There was a howl of protest. The workers complained:

1. The coffee break is a working condition and you can't just take it away at will.
2. A coffee break is established practice in industry.
3. The new service is not an adequate

substitute. We want to leave our desks to drink coffee.

Management answered:

1. A coffee break is not a "right." We gave it voluntarily. What we give we can take away.

2. A coffee break is for coffee. This we are supplying through the "rolling" food wagon.

Was the Company:

Right ☐ **Wrong** ☐

WHAT ARBITRATOR B. MEREDITH REID RULED: "A coffee break is essentially a rest period—a break from the pattern of work—a ceasing of doing what you were doing. The time allowed is to enable the employee to withdraw from labor or exertion for the obvious advantage to the company and the individual of recharging the human physical and mental storage battery. The company is obligated to restore and continue the practice as heretofore carried out, of allowing coffee breaks for the remainder of the contract—unless the practice is changed by mutual consent."

"M" Is for the Money That They Paid Me . . .

What Happened

While Dave Daniels was on his vacation, his mother died. He came home for the funeral. When his vacation period was up, he remained away for three additional days. On payday Dave found that the company did not pay him for the extra time he took off. Daniels argued that the three-day leave was granted to all regular employees. "While I was on vacation I was still a regular employee. Therefore I'm entitled to all of the benefits."

"Yes," the company agreed. "We do have a policy of paying for three days' funeral leave—but that's when the employee is working. Anything that happens during a worker's vacation is his own problem. We don't want to seem harsh, but also, we don't want to establish a precedent."

Was the Company:

Right ☐ **Wrong** ☐

WHAT ARBITRATOR MILLARD L. MIDONICK RULED: "In effect, Daniels lost three working days of his vacation and is entitled to demand up to a maximum of three such days of paid vacation subsequent to the vacation originally scheduled, but lost due to the death of his mother."

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For More Information Circle No. 285

When May Drunken Driving Be Cause for Dismissal?

What Happened:

Following his conviction in Municipal Court for drunken driving, John Jones was discharged by the company for that reason. He insisted that the company had no right to do what it did for a whole long list of reasons:

1. I was not driving a company car. It was my own.

2. I wasn't on company time.

3. I have no influence in the community. I'm an unskilled worker and therefore I can't hurt the company's reputation no matter what I do.

4. I have already paid my penalty for the drunken driving with a conviction by the court.

The company put in a sober plea of its own:

1. We have had the rule for 20 years that anyone guilty of drunken driving would be fired.

2. In the past five years we have discharged three men in accordance with that rule, and none of them had the audacity to take their situation to arbitration.

3. Jones was in such bad shape that he couldn't come to work the next day. He didn't even notify the company. That deserves a penalty, too.

4. We want sober workers in our place—skilled or unskilled—that makes no difference.

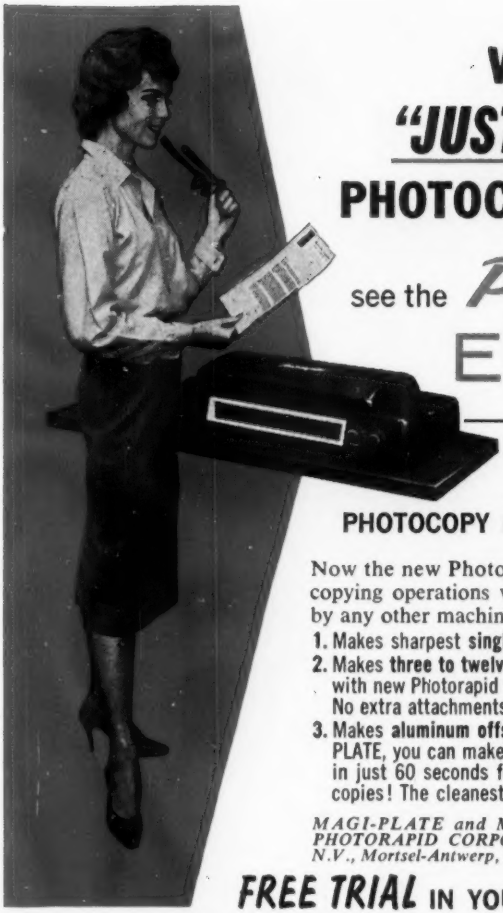
Was the Company:

Right ☐ **Wrong** ☐

WHAT ARBITRATOR HARRY J. DWORKIN RULED: "It is a matter of 'common law' applicable to industrial relations that what an employee does on his own time is not a subject of regulation by the employer. There may be situations where the employer's business is of so sensitive a character as to require that employees be cognizant, at all times, of the good will of the employer and his relationship with the general public, both during and after working hours. In such instances, the violation of rules governing an employee's conduct, even on the employee's own time, may be the proper basis for disciplinary action.

"There is no question that an employer may establish reasonable rules affecting his operations and regulating the conduct of his employees. Generally such rules are designed to operate and to apply during the hours of the employment relationship. They do not customarily extend so as to regulate the conduct of an employee while off duty.

"In this case, however, Jones was engaged as a laborer. The Arbitrator finds it difficult to reconcile the application of the rule here. While not intending to condone the use of intoxicating beverages while operating a motor vehicle, nor to criticize the company's concern for the consequences of such conduct, a conviction for this would not necessarily affect the employee's ability to perform the duties involved in his job. The Arbitrator, therefore, concludes that the violation of the rule pertaining to drunken driving would not afford just cause for discharge."



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For More Information Circle No. 305

CREATES THE MARK OF EXCELLENCE

Executive Typing • Offset Masters Originals for All *Copying Processes*

The sharpness and uniformity of write you've never before been able to achieve with a conventional typewriter ribbon—the clarity of impression that actually approaches quality printing—that's what you'll get with the Columbia M-50 ribbon!

Made of whisper-thin, tiger-strong polyester film, dual coated with a special ink by a patented Columbia process, the Columbia M-50 ribbon gives you: Crisp, full-bodied, executive impressions . . . Superb originals (and that means fine copies) for all copying processes . . . Non-smear, smudge-proof permanence . . . Invisible, halo-free erasures . . . Economy of 50% more yardage than conventional ribbons on the same diameter spool . . . Freedom from troublesome ribbon-fixing interruptions.

Make your "mark of excellence" with a Columbia M-50 ribbon! For a free demonstration of the M-50 on your equipment write: Columbia Ribbon & Carbon Mfg. Co., Inc., 1066 Herb Hill Road, Glen Cove, New York.

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Columbia Ribbon & Carbon Pacific, Inc., Duarte, California

For More Information Circle No. 235

the Tufide Tra-Valise

Virtually indestructible! This unique new concept in attache cases combines slim beauty and TUFIDE stamina, thanks to three Stebco patented features (1) lifetime durability of one-piece molded construction (2) interlocking aluminum frame (3) the "Handle-Lock" that locks open and closes instantly and securely with a single touch.

"Tra-Valise" is lightweight, easy to handle and carry . . . holds business papers plus a change of clothing or samples . . . is dust-and-moistureproof. Unconditionally guaranteed 5 full years . . . a wonderful long-term investment for men who are going places.

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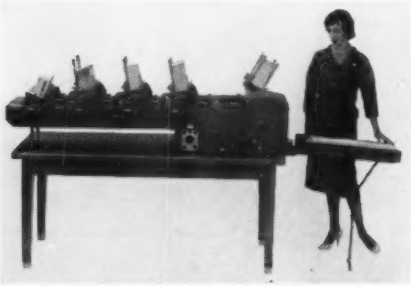
For More Information Circle No. 244

New Products

INSERTING MACHINE

Friden, Inc., San Leandro, Calif., announces the Friden-Ertma Mail Inserter designed to handle a variety of envelope sizes. In one operation, it automatically gathers and inserts into envelopes as many as eight inserts, then seals, counts



and stacks the envelopes, ready for mailing. The machine takes envelopes as large as 9 5/8″ in length and 6 3/8″ in depth, or as small as 3 3/16″ in length and depth. The Friden-Ertma's compact size permits table-top office installation and easy servicing. One to eight inserting stations are available, including special stations for punched cards and open feeding. Shown above is a four-station model with punched card station. **For More Information Circle No. 171.**

KEY PUNCH DESK

Diebold, Inc., Canton 2, Ohio, announces a key punch desk built of modular design permitting users to predetermine their storage arrangements and change them as the need arises. This eliminates the possibility of users being "frozen" into any set situation. Three drawer sizes are available and individual units lock together without special tools; are easily unlocked when desired for complete flexibility. Each drawer has a recessed, full-grip plastic handle and label holder insert positioned for best visibility. An integral drawer stop automatically engages when drawer is extended to maximum distance, preventing accidental spillage of contents, although, when desired, drawer can be completely removed. Key locks are optional. Nylon glide bearings carry weight of loaded drawer and are self-lubricating and maintenance-free. Deluxe drawer also rides on

a nylon roller suspension assembly which carries back-weight of fully-loaded drawer in a balanced manner. Further flexibility and versatility is obtainable by interstacking drawer units in combination with units of varying sizes equipped with shelf inserts. Other arrangements are possible by use of channel inserts for control panel storage. Inserts can accommodate all control panel sizes and access from both front and back of the desk can be arranged. **For More Information Circle No. 139.**

PHOTOCOPIER

Rex-Rotary Distributing Corp., 387 Park Ave. South, New York 16, N. Y., introduces the Rex-A-Copy Book Printer, a flatbed photocopier. Its intense light source takes care of exposure within a second or so and the automatic, rapid developer finishes a letter-size sheet in about eight seconds. A timing device actuates the light source and can be set from 1/5 to 60 seconds. This printer is a combination of an exposure unit and an automatic developer to which a siphon-suction unit is added to eliminate manual

contact with the fluid and prolong the life of the developing fluid. It produces copies from documents printed on one or both sides, magazines or bound books. Black-and-white copies can be reproduced from originals in any color, whether typed, duplicated, or handwritten; in ink, pencil or ballpoint. Stamps, letterheads, embossings, signatures, balance sheets, layouts, drawings and charts will reproduce easily and quickly. Based on the diffusion principle, machine eliminates need for darkrooms, fixing and rinsing. It is available in two sizes: Model 9 with a copying surface up to 9½" x 18½" and Model 14 with a copying surface up to 14" x 21". **For More Information Circle No. 131.**

SPEAKER'S PROMPTER

Telit Industries, Inc., 226 S. Wabash Ave., Chicago 4, Ill., unveils a portable electric prompting device, the TelExecutive which, with a leather carrying case, extra spools, script paper and editing kit, costs $169.50. The script is prepared on

continuous paper, wound on an interchangeable spool and placed in the prompter. It can be prepared on a large-faced typewriter, hand-lettered or typed on a standard typewriter. During a talk, a palm-sized hand control is used to control speed at which the script moves. It can be stopped at any time, operated at a constant speed, or reversed. Each spool holds an hour or more of continuous script, depending on the size of type used. Dim or bright illumination from within the unit provides glare-free light regardless of room lighting. The product plugs into an ordinary AC outlet and may be placed on a desk, table or lectern. It is smaller in size and lighter in weight than a portable typewriter. Where a large type face is desired for the script, but necessary facilities are lacking, Telit maintains a 24-hour manuscript service. **For More Information Circle No. 103.**

OFFSET PLATE

S. D. Warren Co., 89 Broad St., Boston, Mass., is introducing the FotoPlate 8, a negative-working, presensitized lithographic plate for offset duplicating. The

plate is made in 16 sizes for presses 8½″ x 12″ through 17″ x 22″, priced from 12c to 54½c. It has rapid development time and versatility. A faster sensitizer reduces exposure time and permits faster roll-up, less waste and high-speed processing. Three methods of development include on-press development of freshly exposed plate; use of a one-step developer and desensitizer; conventional development and desensitizing with developing ink and gum. The fine-grained plastic surface of FotoPlate 8 is designed to deliver a minimum of 5000 copies with clean running and faithful reproduction of halftones, type and solids. A thickness of .008″ provides stability and easy handling on press. Sensitized one side only to permit less spoilage than normal with two-side plates. **For More Information Circle No. 114.**

THREE-COIN CHANGER

Standard Change-Makers, Inc., 422 E. New York St., Indianapolis 2, Ind., makes the manually operated Standard Multi-Changer that holds up to $300 in change and can be equipped with any of 364

different combinations of coins, tokens and change, or can be adapted for use with foreign coins. It eliminates lost time spent hunting for change, reduces work interruption and builds employee goodwill. It has an extra heavy-duty steel cabinet with double locking devices for protection against vandalism. Easy to install, secured to a wall or stand. Overall size is 19½″ high, 24⅝″ wide and 7″ deep; available in several colors. **For More Information Circle No. 138.**

FOLDING DAIS

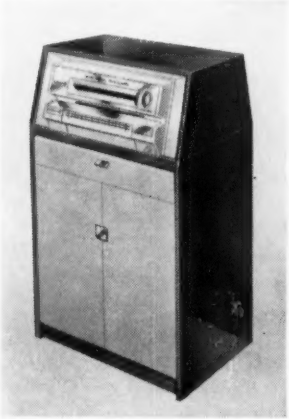
Wayne Iron Works, Wayne, Pa., has developed a folding stage platform or dais which requires only one operator and is available in increments of 1″ for custom installation in hard-to-fit areas. Accordion fold permits space-saving storage. A model is also furnished as a folding riser with staggered heights. Rails and stairs may be ordered as accessory equipment.

The stage opens and closes in one continuous motion, moving on ball-bearing swivel casters. It is automatically key locked in folded position and secured in extended position by foot-operated rubber floor stops at each corner. In addition to its own weight, the stage is designed to carry a live load of 150 lbs. per sq. ft. and resist horizontal sway loads of 15 lbs. per sq. ft. Available with Douglas fir or Philippine mahogany deck boards measuring 1¼″ x 10″ before surfacing. Support panels of five-ply, ⅝″ thick Douglas fir plywood are joined the full vertical length with hinges to allow complete folding. All wood surfaces are sanded, edges are eased and finished in a double coat of hot-sprayed, clear lacquer. For safety and attractive appearance, there are no exposed boltheads or hardware on top deck. Stage dimensions range in width from 6 to 18 ft. and in height from 18″ open and 27″ closed to 48″ open and 57″ closed. Depths range from 20 ft. 8″ open and 3 ft. 11″ closed to 34 ft. 11″ open

and 6 ft. 6½″ closed. Hard rubber casters protect finished floors and require no lubrication. **For More Information Circle No. 107.**

PHOTOCOPIER

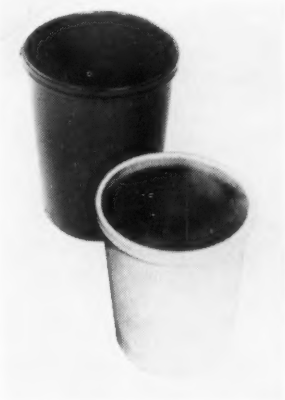
Speed-O-Print Corp., 1801 W. Larchmont Ave., Chicago 13, Ill., unveils the Model 9-C photocopier, called a complete, compact photocopying department. It includes storage space for reproduction



supplies, automatic ejectors for legal and letter size sheets. Clean and simple to operate, using Redi-Pak cartridges for handling developing fluid without mixing or spilling. Price is $229. **For More Information Circle No. 162.**

FIRE-RESISTANT WASTEBASKET

National Vulcanized Fibre Co., Maryland Ave. & Beech St., Wilmington 99, Dela., announces the addition of a fire-resistant receptacle to its line of Vul-Cot wastebaskets. Made with Pyronil fibre, a material that will not support combustion, this unit can be used wherever a fire hazard is present, or where fire safety laws require the waste receptacle must be intact after its contents are consumed by fire. An advantage of the Vul-Cot is its recessed bottom. There is practically no heat transfer which prevents burning of rug or floor under the basket. This receptacle has all the features of regular Vul-Cots plus fire resistance. It comes in gray or green or with clear lacquer over



maroon brown, olive green, or green-gray. Available in all models except rectangular or half-round. For catalog price sheet, **Circle No. 163.**

SHELF FILES

Wright Line, Inc., 160 Gold Star Blvd., Worcester, Mass., unveils its Hifiler for open shelf filing, designed to concentrate

filing by using the area above ordinary drawer files. This way up to 60% of floorspace is saved. Filing is faster and

every record is visible. There is no protruding hardware to catch clothing or take extra space. Units available in 5, 6, or 7 shelf heights, with or without doors, and for use with legal or letter size folders. They can also be used single or double faced and in batteries. For descriptive literature, **Circle No. 144.**

ADDING MACHINE

R. C. Allen Business Machines, Inc., 680 Front Ave., N.W., Grand Rapids, Mich., introduces an electric eight column, total eight, heavy duty adding machine for general business use. This Model 88 is new throughout, from exterior design and quiet electric motor to the Polynesian bronze color of the compact, mar-resistant case. The Model 88 features a listing and totalling capacity of 999,999.99,

direct subtraction that prints in red, and visible answer dials to show accumulated total. It has a motorized key for multiplication and repeat items, correction key that automatically restores keyboard to normal, and automatic space-up totalling. For quieter operation, all interior mechanisms rest on a sound deadening polyester mattress. An easy-change, completely enclosed paper housing and clean, quick ribbon change are other features that contribute to overall efficiency and ease of operation. **For More Information Circle No. 111.**

COPYING MACHINE

Charles Bruning Co., 1800 Central Rd., Mt. Prospect, Ill., introduces an inexpensive, fluorescent light copying machine. Known as Model 105 Copyflex, this economy unit, when used with fast diazo papers, is recommended by the manufacturer for those who sell on credit and bill

periodically. Physicians, dentists, drugstores, florists, etc., can set up a simple diazo accounts receivable system. A doctor, for instance, can make notations on translucent ledger cards. To bill he simply inserts card and a sheet of copying paper into the 105; diazo copy is sent to the patient as a statement. This eliminates all transcription with its cost, inconvenience and possibility of error. **For More Information Circle No. 141.**

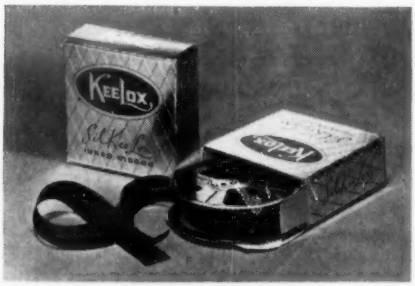
OFFSET INKS

American Type Founders Co., 200 Elmora Ave., Elizabeth, N. J., introduces the ATF Lithomaster line of packaged inks for offset duplicators. These inks were developed primarily for use on ATF Chief 15, Multilith, A.B. Dick and similar duplicators. They print sharply and cleanly with exceptionally rapid setting and fast drying with maximum stability on the press. Intensive testing has proved them equally good for direct image and presensitized plastic, as well as paper, zinc and similar plates. Other features include uniform consistency and color, high finish on regular coated stock, and brilliant fin-

ish on enamel, Kromekote and similar papers. The inks are packed in convenient 1 lb. cans and available in many colors including general purpose black, halftone black, all-purpose brown, milori blue, medium red, lemon yellow, and bright green. **For More Information Circle No. 116.**

TYPEWRITER RIBBON

Kee Lox Mfg. Co., Dept. 107, 10 Kee Lox St., Rochester 1, N. Y., makes SilKeeLox, a fine silk fabric typewriter ribbon for executive and professional correspondence where sharp impressions and neat appearance are of utmost importance. SilKeeLox is claimed to give an impression very nearly as sharp as the metal



type itself. It is extremely tough and durable and its ink holding qualities add substantially to the service life of the ribbon. Less frequent ribbon changes are necessary as the thin durable weave allows more ribbon to be placed on all standard typewriter spools. Ribbon length also is an economy factor since more impressions can be obtained. **For More Information Circle No. 128.**

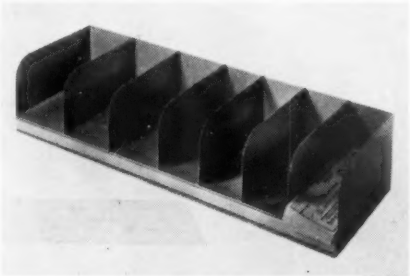
CC TV TRANSMITTER

Television Utilities Corp., Div. of Nord, 300 Denton Ave., New Hyde Park, N. Y., announces a closed circuit television system without lights, cameras or optical system, yet it produces a sharp, intense, high resolution image. By eliminating the camera and substituting a special method of detecting and transmitting image brightness differences, Scan-A-Graph reduces to a minimum difficult focusing and distortion problems. Scan-A-Graph insures instant accurate visual

communication with as many as 500 locations simultaneously. Operating procedures are simple and no specially trained personnel are required. **For More Information Circle No. 146.**

SORTING RACK

Lit-Ning Products Co., 170 N. Robertson Blvd., Beverly Hills, Calif., introduces a check and bill sorting rack to speed sorting checks, invoices and similar mate-



rial. Available in standard gray, tan, mist green and green. Model 7 CS has seven compartments, weighs 6½ lbs. and measures 5″ x 24″ x 8″. Three other models

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It's amazing the things that modern microfilm can do to save time, money, and improve efficiency in business. Take cycle billing for example. When sales slips are on microfilm there's no need to type detailed invoices. There's no need to collect bulky files of hard-to-handle paper. At each billing period a minimum of information is typed on the customer's invoice—just the date and the total amount purchased. Then both the invoice and the original sales slips are sent to the customer.

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City_____ Zone____ State_____

For More Information Circle No. 224

vary in size and compartments. Other new accessories brought out this year by Lit-Ning Products are listed in a new catalog supplement. For the catalog, **Circle No. 135.**

MARKER

Old Town Corp., 750 Pacific St., Brooklyn 38, N. Y., announces the addition to its line of products of Town-Mark, a long-lasting marker that dries immediately upon

contact. It is waterproof, rubproof and smearproof, and cannot leak or spill. Refilling is no problem, as each marker is a

TELETYPE *or* TYPEWRITER

NOISE CAN BE STOPPED

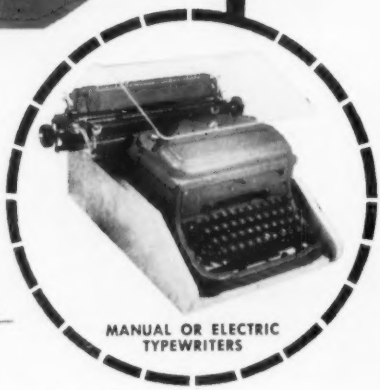
LIGHT WEIGHT, MODERN STYLING

Today's automatic data processing machines make office work much more efficient, but a degree of that efficiency is lost because of the resultant noise factor. With the new lightweight fiber glass Gates Acoustinet, machine clatter is absorbed at its source. Now office workers can concentrate on media. Modern style and decorator colors make our Acoustinet a handsome addition to any office!

Write today: give machines, make, model used and measurements.

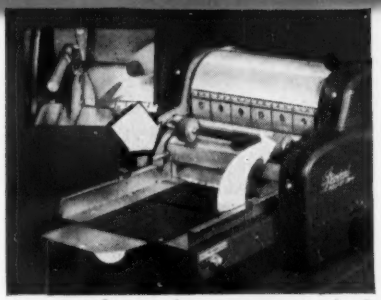
GATES ACOUSTINET, inc.

707 SHAULDING TRUST BLDG. SHERIDAN DRIVE
TONAWANDA, N. Y.

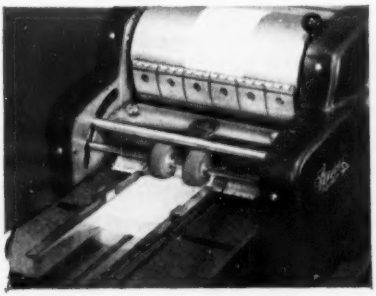


MANUAL OR ELECTRIC TYPEWRITERS

For More Information Circle No. 309



Arrow indicates how automatic feed swings away for loading tray or for hand feeding. (Inset) Exclusive, self-leveling stripper pin with optional blades for positive feeding of paper or card stock.



Feed rollers slide together, center feed small forms, coupons, post cards, automatically. Segmented master clamp with blockout slot firmly grips all masters. Scale on drum and tray for positioning.

EVERYTHING YOU COULD WISH FOR IN A FLUID DUPLICATOR...

answer to the copying problems of Business • Industry • Institutions

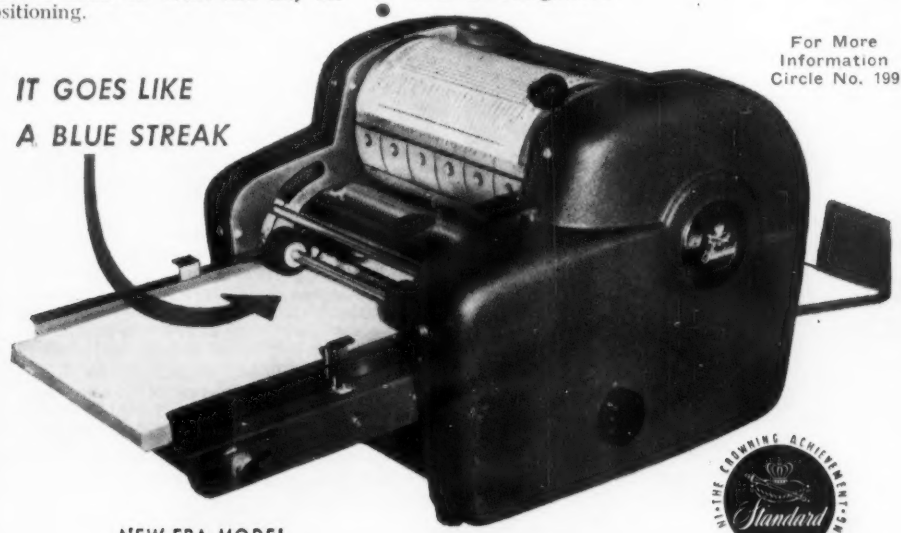
Standard ROCKET Electric

This fabulous Standard Rocket Duplicator goes like a blue streak . . . goes smoothly, quietly, faultlessly. The last word in design, it provides the fastest, most satisfactory method to reproduce rush notices and bulletins or to handle, in a single writing, all the copies necessary for purchasing, production, order-invoicing or for educational purposes. With motor self-contained, it's convenient to use on a desk, file top or table. Matching cabinet available, if desired.

Standard, pioneer of fluid duplicating in America, with a proud reputation to uphold, guarantees you a top quality duplicator at a most reasonable price. Write for literature or a demonstration. There's no cost or obligation.

For More Information Circle No. 199

IT GOES LIKE A BLUE STREAK



NEW ERA MODEL

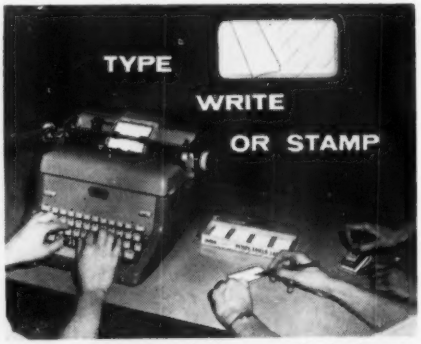
THE CROWNING ACHIEVEMENT IN FLUID DUPLICATING • Standard

STANDARD DUPLICATING MACHINES CORPORATION, EVERETT 49, MASSACHUSETTS

handy, disposable container. Town-Mark writes on almost anything, including metal. It has hundreds of uses and is fully guaranteed. Available in 14 assorted colors: black, red, green, blue, purple, orange, brown, light blue, pink, yellow, light brown, dark gray, light gray and light green. **For More Information Circle No. 104.**

PROTECTED LABELS

W. H. Brady Co., Dept. 1619, 770 W. Glendale Ave., Milwaukee 9, Wis., has added a dirtproof, oil-resistant, weatherproof label that may be typed, stamped or written on, to its line of pressure-sensitive products. Tradenamed the Perma-Shield Label, it combines a color-bordered write-on label with a tough, clear Mylar shield. The shield is applied over the written-on label and slightly overlapping so that all edges are permanently protected. Both label and shield are pressure-sensitive—require no moistening to apply them. The labels have write-on surfaces that accept pencil, pen, ballpoint, rubber-stamping, printing or typing. They are supplied in easy-to-use continuous form, ready to slip into a typewriter. The shield rides on the Blue Streak liner, and labels and shield are easily separated from the



liner for fast application. Typical uses for these labels are for marking electrical control panels, machinery and equipment, shipping containers, drums and carboys, shelving, bins and drawers, materials handling equipment, tote boxes, files and file

SPEEDRACK

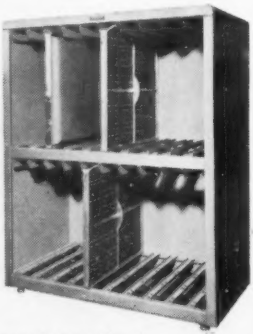
BY TABULATING ACCESSORIES EXCHANGE, INC.

FAST!
new
easy
economical

The nylon rollers make board access and storage virtually a one finger operation.

Pat. Applied For

Model 4071 40" Wide; 22" Deep; 48" High; Shipping Wt. 195 lbs.



The newest and most practical idea in 407 type panel storage Stores 20 panels in less space.

**Write or wire Oakland office for full information.*

TABULATING ACCESSORIES EXCHANGE, INC.

*OAKLAND	SEATTLE	LOS ANGELES
578 W. Grand Avenue	2207 2nd Avenue	1060 S. Olive St.
TWinoaks 3-4604	MA 4-1341	RIchmond 9-7538

For More Information Circle No. 310

engraved solid brass, bronze or aluminum

DESK-n-DOOR markers

One or two lines, up to 20 letters per line

Desk Marker bases — solid walnut or solid hardwood with polished ebony finish.

Door Markers have special adhesive backing, stays put on glass, wood, plaster, metal, etc. No screws or holes to mar surface.

Door Marker, 7"x1"
Aluminum, Style DOA $1.95 ppd.
Brass, Style DOB . . 2.95 ppd.
Bronze, Style DOZ . . 3.95 ppd.

Desk Marker, walnut base 8½"x2"
Aluminum, Style DEAW $2.95 ppd.
Brass, Style DEBW . . 3.95 ppd.
Bronze, Style DEZW . 4.95 ppd.

Desk Marker, ebony base 8½"x2"
Aluminum, Style DEAE $2.95 ppd.
Brass, Style DEBE . . 3.95 ppd.
Bronze, Style DEZE . 4.95 ppd.

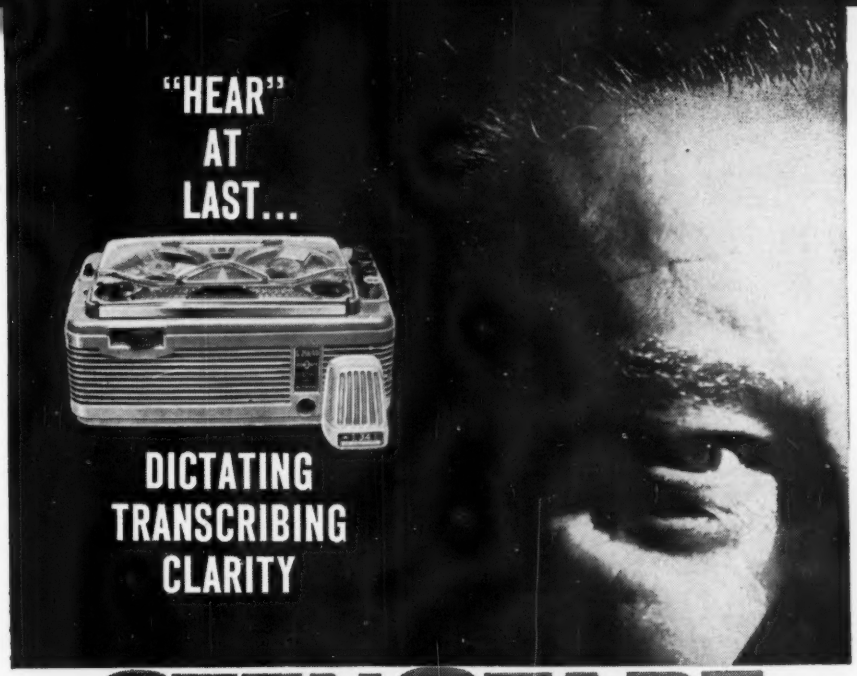
FAST SERVICE — WE SHIP WITHIN 48 HOURS
SATISFACTION GUARANTEED OR YOUR MONEY BACK

Business buyers — write today on your letterhead for free sample, full-color catalogue and quantity discounts.

Spear ENGINEERING COMPANY

537 Spear Bldg., Colorado Springs, Colo.

For More Information Circle No. 311



STENOTAPE GELOSO

offers true "professional" dictating transcribing sound and efficiency

Listen to this performance... here is the soundest practice you can establish to end paper-work problems. LISTEN: StenOtape gives you the greatest clarity of sound in the dictating field today. This 6½ lb. compact unit, with its extremely sensitive microphone records every word perfectly within a 30 foot radius. You can actually dictate comfortably from any point in the room. Seated and relaxed, you can tape interviews, conferences, comfortably; and because of StenOtape's unique sound-fidelity, your secretary will hear and enjoy every word of your error-free dictation. Doctors and Dentists can play their post graduate educational tapes on StenOtape and enjoy superb playback quality. At the office, home or away, StenOtape records everything up to 2 hours on one tape... phone calls, conferences, dictation, *even music!* Hear the StenOtape difference now... it's an exceptional value!

only $179.95

FULL YEAR GUARANTEE Federal Tax Included

Check These Other Major StenOtape Features:

● Accurate word-counter. ● Built-in Speaker. ● 4" high, weighs only 6½ lbs. ● Travels in handsome attache case. ● Low-cost accessories available to cover every dictating-transcribing-recording situation. ● Precision designed by Geloso, Europe's largest integrated electronics manufacturer of communication equipment. ● Sales and Service Coast to Coast.

FREE! LIFETIME SUPPLY OF MAGNETIC TAPE MAIL THIS COUPON NOW!

AMERICAN GELOSO ELECTRONICS, INC.
251 Park Ave. So., Dept. 113, New York 10, N. Y.

Gentlemen: Please rush, without obligation, illustrated booklet "The Facts About Dictating Machines." I understand that should I decide to purchase a StenOtape this coupon entitles me to a lifetime supply (6 rolls) of reusable Magnetic Tape worth $15.00.* *Offer expires July 31, 1960*

Name_____

Address_____

City_____ Zone___ State_____

For More Information Circle No. 347

Includes everything you need to make offset plates and duplicating masters: vacuum frame; motor; pump; gauge; and nuArc's popular N-20 arc lamp.
With automatic carbon strike and feed mechanism, No. N-20A $305

COMPACT • INEXPENSIVE
Arc Lamp
AND
Vacuum Frame
COMBINATIONS

Economical N-16W unit. Includes manually controlled arc lamp; vacuum frame.

$139

Complete with pump and motor, $196.50

Send for Bulletin A210-0

nuArc® COMPANY, INC.
4110 W. GRAND AVE.
CHICAGO 51, ILL.

NEW YORK OFFICE: 415 PARK AVE. SO., NEW YORK

DARKROOM SAFELITES

For table, wall or ceiling mounting. Metal construction. Ruby or white lights. Six standard sizes—or can be made to your specifications.

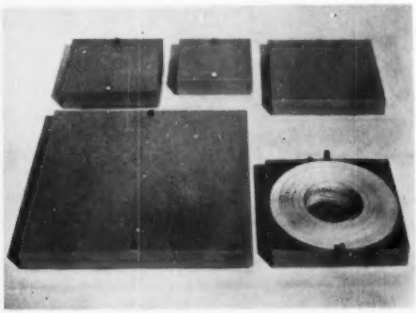
nuArc COMPANY, INC.

4110 W. GRAND AVE. • CHICAGO 51, ILLINOIS
For More Information Circle No. 312

folders, binders, proposals and laboratory equipment and containers. Labels will stick tight to any clean, dry surface of wood, metal, plastic or ceramic. They come in 12 sizes; square, rectangular, round and oval. Each size is available in eight different border colors for color coding. Labels can be pre-printed with special copy, trademarks or illustrations inside the border, or made in any special size or shape. Packaged in see-through plastic top boxes. For samples and prices, **Circle No. 136.**

PUNCHED TAPE MAILERS

Dresser Products, Inc., Box 2035, Providence 5, R. I., offers heavy duty mailers for safely mailing full rolls of punched tape. These take a full roll of punched



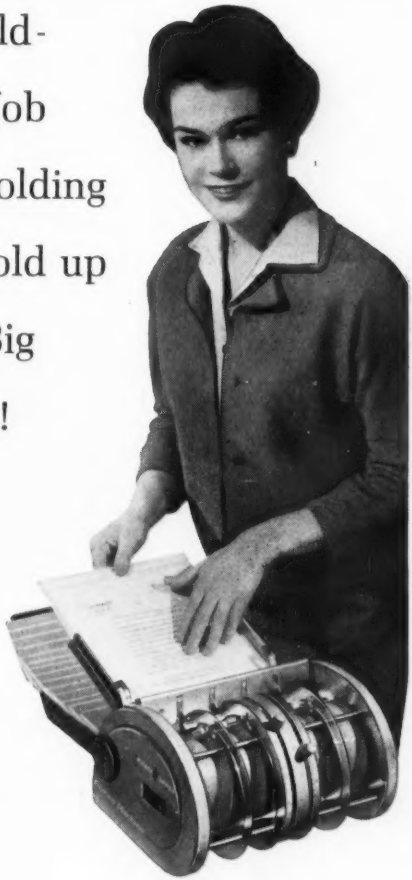
tape, measure 9⅝" x 9⅝", and are an inch deep. Sizes of 4", 5" or 6" are also available. Equipped with metal closing tabs to protect tapes for mailing or storage. For prices, specifications and catalog of data processing accessories, **Circle No. 145.**

CONTACT SCREENS

Caprock Developments, 165 Broadway, New York 6, N. Y., offers Caprock Universal Gray Contact Screens for producing halftones for offset, photocopying, photoengraving and silk screen use. These screens are not expensive and are made in sizes up to 23" x 29" with from 32 to 250 lines per inch. No extra cost for pre-angled rulings. Advantages claimed for Universal Gray Contact Screens are that

Girl spends more

time getting ready to fold-
than the entire folding job
would take on an FH Folding
Machine ... which can fold up
to 80 letters a minute. Big
time saver in any office!



An FH is set in seconds by moving two knobs on inch scales to fold sizes wanted. Makes eight basic folds. Takes all standard papers, from 3 by 3 to 8½ by 14 inches. Even folds multiple or stapled sheets. Costs less than a standard typewriter. One FH can save time and work for several departments. The FH can also be attached to PB's Model 3300 Inserting Machine for combined folding and inserting.

Ask any Pitney-Bowes office for a demonstration. Or send coupon for free illustrated booklet.

FREE: *Handy desk or wall chart of postal rates, including recently increased parcel post rates.*

Pitney-Bowes
Folders & Inserters
Made by the originator of the postage meter . . . 139 offices in U. S. and Canada.

PITNEY-BOWES, INC.
3404 Walnut Street, Stamford, Conn.
Send free ☐ *booklet on PB Folding and Inserting Machines* ☐ *postal rate chart.*

*Name*_____

*Address*_____

For More Information Circle No. 278

This one low-cost, easy-to-use machine

...at the heart of Automatic Keysort Data Processing

What you see here is the Keysort Tabulating Punch—the only complete punched-card processing machine in the business world. It is the only machine you require to automatically tabulate vital figure-facts on every phase of operation for fast, accurate management reports. No special training is required for operation, and the machine imposes no restrictions on present accounting procedures. Rental is less than $100 a month. Your nearby Royal McBee Data Processing Representative will be happy to arrange a demonstration. For complete information, call him or write Royal McBee Corporation, Data Processing Division, Port Chester, N. Y. for brochure G-39.

ROYAL McBEE · *data processing division*

NEW CONCEPTS IN PRACTICAL OFFICE AUTOMATION

For More Information Circle No. 272

they shoot faster, give more contrast (if desired), and may be washed, allow shooting chrome yellow and color copy for black-and-white reproduction, allow screening and separating colors directly from transparencies or reflection copy, simplify highlight (drop-out) negatives and give uniform tones from light areas to shadows. No colored lights or filters are required. Screens can be used in camera, enlarger or contact printer. For literature describing the use of these screens, **Circle No. 169.**

MICROFILM CATALOG FILE

Rogers Publishing Co., 800 Acoma St., Denver, Colo., has compiled the VSMF Microfilm Catalog File, in collaboration with Recordak Corp., for the missile-aircraft industry. Future editions will be compiled for manufacturers of data processing equipment, radar, television, autos, electrical power and distribution equipment, industrial machinery, instruments,

photo equipment and appliances. The system is leased at an annual cost of what is said to be less than a file clerk's salary. In less than a minute, user can locate the catalog page for any product or component and either read it on a viewing screen or make a photocopy of it to take to his desk. Reader scans microfilm file at 200 pages a second and system provides name and address of nearest sales office supplying each product. Reels are revised and updated every four months. **For More Information Circle No. 115.**

What PROGRAM-MATIC System Control does for your offset duplicator

The new ATF Program-Matic System Control

- simplifies duplicator operation
- cuts paper waste and down time
- shortens the duplicating cycle
- stops your duplicator automatically at end of run
- lets you stop any time...and resume without losing count

(Models of the ATF Program-Matic System Control are available for Multilith 1250 and Whitin Masterlith, as well as the ATF Chief 15 illustrated.)

American Type Founders

200 Elmora Ave., Dept. O, Elizabeth, N. J.

Please send descriptive literature on ATF Program-Matic

for ..... duplicator.
(make)

NAME ..... TITLE .....

COMPANY .....

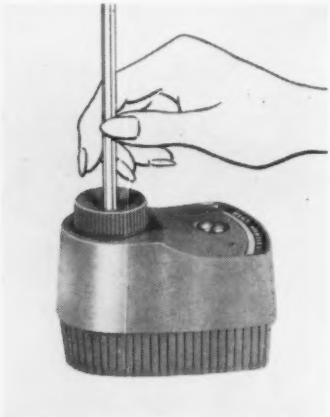
STREET & NO. .....

CITY ..... ZONE ..... STATE .....

For More Information Circle No. 313

ELECTRIC PENCIL SHARPENER

Minitone Electronics, Inc., 55 West 13th St., New York 11, N. Y., offers the Kent Kordless electric pencil sharpener which



has no switches to turn on and off and nothing to plug in. Completely automatic, it uses ordinary C batteries. Sharpens any standard size pencil. Unit is easy to empty, is portable and can be used anywhere. Operates on a principle that is said to utilize battery energy more efficiently. Factory guaranteed for one year, comes complete with batteries and six additional tool steel cutters for $11.95 retail. **For More Information Circle No. 137.**

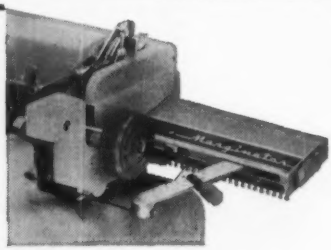
OFFSET DUPLICATOR COUNTER

A. B. Dick Co., 5700 W. Touhy Ave., Chicago 48, Ill., has an accessory for their offset models 350 and 360 that automatically counts the exact number of copies and shuts off the paper feed. Operator merely sets the dial for the number of copies needed (up to 2000) turns on duplicator and starts the feed. When desired number of copies is duplicated, counter shuts off paper feed level automatically. This standard counter will continue to operate in the regular manner on runs longer than 2000 copies, and serve as a continuous recorder for daily production records. **For More Information Circle No. 109.**

NOW! TYPING that looks like PRINTING —

at a fraction of the cost!

Inexpensive Typewriter Composition That Looks Like Expensive Typeset Printed Matter



Your "copy" CAN Look Like This

Now - your typewriter is more useful than ever. Anything that is now set up in type can be well reproduced with typewriter composition, and JUSTIFIED so that regular type-set printing is simulated. Regardless of the process of reproduction -- whether for a daily newspaper, an elaborate brochure, or a simple offset, mimeographed, or hektographed bulletin, the Marginator now offers you composition at greater savings than ever before possible. The two columns shown are IDENTICAL line for line. Compare them and see how perfectly the MARGINATOR evens up the right-hand margin.

Your "copy" Now Looks Like This

Now - your typewriter is more useful than ever. Anything that is now set up in type can be well reproduced with typewriter composition, and JUSTIFIED so that regular type-set printing is simulated. Regardless of the process of reproduction -- whether for a daily newspaper, an elaborate brochure, or a simple offset, mimeographed, or hektographed bulletin, the Marginator now offers you composition at greater savings than ever before possible. The two columns shown are IDENTICAL line for line. Compare them and see how perfectly the MARGINATOR evens up the right-hand margin.

Write for Free Illustrated Folder

MARGINATOR COMPANY, 1121 W. Magnolia Ave., Burbank, Calif.

For More Information Circle No. 314

"THERMO-FAX" Brand Copying Machines make a copy in just 4 seconds. This speed is possible because copies are made electrically directly from an original. Paperwork systems are simplified. *Statements* go out faster. Gummed *addressing labels* are made instantly. *Correspondence* is answered without time-consuming dictation. Even *laminating* can be done for papers needing lasting protection. To learn all this fast copying can do, call your local dealer. Or mail the coupon.

Thermo-Fax BRAND COPYING PRODUCTS

3M COMPANY

MINNESOTA MINING AND MANUFACTURING COMPANY

...WHERE RESEARCH IS THE KEY TO TOMORROW

THE TERM "THERMO-FAX" IS A REGISTERED TRADEMARK OF MINNESOTA MINING AND MANUFACTURING COMPANY

MINNESOTA MINING & MANUFACTURING CO.
DEPT. DBY-70, ST. PAUL 6, MINNESOTA

Please show me, at no obligation, how fast electric copying with "Thermo-Fax" Copying Machines can simplify paperwork at low cost.

Name _____

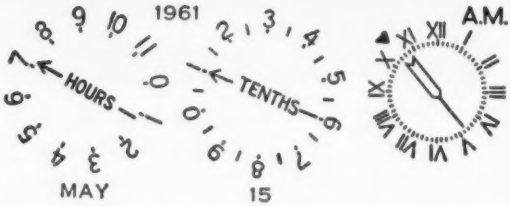
Firm _____

Address _____

City _____ Zone _____ State _____

For More Information Circle No. 252

Here's how Calculagraph, and only Calculagraph, does it!



Automatic foolproof elapsed time records for any cost system

The Calculagraph computer completely eliminates time-consuming, error-producing manual computations to obtain elapsed time for labor costs. The exclusive Calculagraph principle automatically computes the "difference" in starting and finishing times and prints the elapsed time in hours and minutes or in hours and tenths (as shown). Arrows indicate the exact elapsed time. It can be "programmed", too, to subtract all "idle" time such as lunch periods, etc. No expensive changes are necessary to include Calculagraph in your cost system, regardless of what it is. Write today for complete information and enclose samples of your job tickets.

INDUSTRIAL DIVISION

CALCULAGRAPH Company 281 Ridgedale Ave., Harrison, N. J.

For More Information Circle No. 279

OFFSET PLATEMAKER

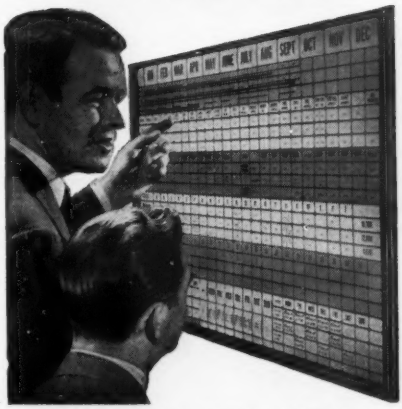
Photorapid Corp., 142 Oregon St., El Segundo, Calif., is introducing the Pioneer III platemaker, designed for the larger press owner. This self-contained unit, with vacuum printer and large motor-driven processor, will take original copy up to 14" x 24" and plates 14" x 17" or longer. Its 14" processor is suitable for Camera-Speed Magi-Plates as well as the size-to-size Magi-Plate by Gevaert. Better reproduction from paste-ups is made possible with Pioneer III, as with Pioneer II,

which has the same features, but a smaller processing unit. Both make press-ready offset plates in 60 seconds for 39c each. Using Magi-Plates, quality runs of 40,000 and more are possible and plates may be safely and easily filed for re-runs of the same quality. Both models have a vacuum top and are vacuum printers. Pioneer I, also being continued, has all the features of Pioneer II except the vacuum frame. Both have a 14" x 17" printing surface. **For More Information Circle No. 125.**

NOTE & CHRISTMAS CARDS

Relief Printing Corp., 63 Summer St., Boston 10, Mass., makes Poor Richard Just-A-Note cards and Christmas cards with matching envelopes. Both these

How To Get Things Done Better And Faster



BOARDMASTER VISUAL CONTROL

- ☆ Gives Graphic Picture—Saves Time, Saves Money, Prevents Errors
- ☆ Simple to operate — Type or Write on Cards, Snap in Grooves
- ☆ Ideal for Production, Traffic, Inventory, Scheduling, Sales, Etc.
- ☆ Made of Metal, Compact and Attractive. Over 500,000 in Use

Full price $49.50 with cards

FREE 24-PAGE BOOKLET NO. F-200 Without Obligation

Write for Your Copy Today

GRAPHIC SYSTEMS

Yanceyville, North Carolina

For More Information Circle No. 315

The world's smallest and most economical adding machine... **SWIFT**

Only **$99.50** plus tax

SWIFT BUSINESS MACHINES CORP.
GREAT BARRINGTON, MASSACHUSETTS

For More Information Circle No. 316

Don't break your back digging up buried information!

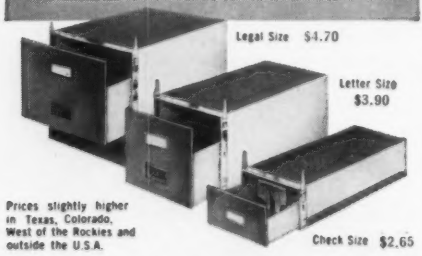
LOCATE YOUR RECORDS EASILY—No more fussing and fuming. With Pronto files your records are as active as your regular files.

BEAUTIFUL APPEARANCE—Finish in attractive olive green to match your regular office files.

STURDY CONSTRUCTION—Built of 275 lb. tested corrugated fibre board . . . reinforced with steel on the shell and the four corners of the drawers as well.

SAVE FLOOR SPACE—Prontos are constructed to interlock into solid units and stack as high as the ceiling.

PRONTO
STORAGE FILES



Prices slightly higher in Texas, Colorado, West of the Rockies and outside the U.S.A.

PRONTO FILE CORPORATION
415 MADISON AVENUE, NEW YORK 17, N.Y.

For More Information Circle No. 336

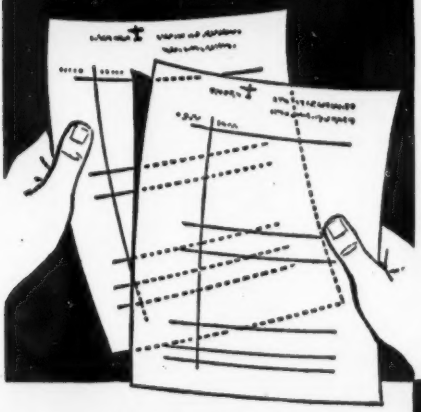
items are designed so that the sender can insert his business card to personalize the message. The Just-A-Note cards have space for correspondence and, on the back page, there is a printed quotation from "Poor Richard's Almanac." The Christmas cards come in several colorful designs suitable for businessmen and especially salesmen. For illustrated literature and prices, **Circle No. 118.**

DATA PUNCH

Victor Adding Machine Co., 3900 N. Rockwell St., Chicago 18, Ill., has an improved data punch that offers punched data processing tape as a by-product of routine adding machine computations. The unit consists of the Victor Premier ten-key adding machine (full keyboard Custom Model also available) with a tape punch.

Together they perform as a compact system for faster, more complete study of sales, cost accounting, inventory and payroll with little more effort than operating a standard adding machine. The keyboard is engineered so that it is not necessary to remove fingers from numerical keys once correct controls are set. Unit produces 5, 6, 7 or 8 channel punched tape at 20 characters per second. Variable field control selector permits fully optional control over columns to be punched. Function selector allows operator to punch items only, totals only, or both. The tape punch may also be turned off completely and unit operated as any adding machine. During all processes the

Get EXECUTIVE copies from your direct print copy machine with . . .



Patapar®

TRANSLUCENT MASTERS

- SHARP *enough for the Board of Directors*
- FAST *enough for the busiest executive*
- INEXPENSIVE *enough for the smallest budget*

• From the most detailed engineering drawing to typed or handwritten reports, every line is clearly reproduced in seconds with Patapar Translucent Parchment masters.

Save time, save dollars and add greater efficiency to your office.

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Name _____
(PLEASE PRINT)

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Company _____

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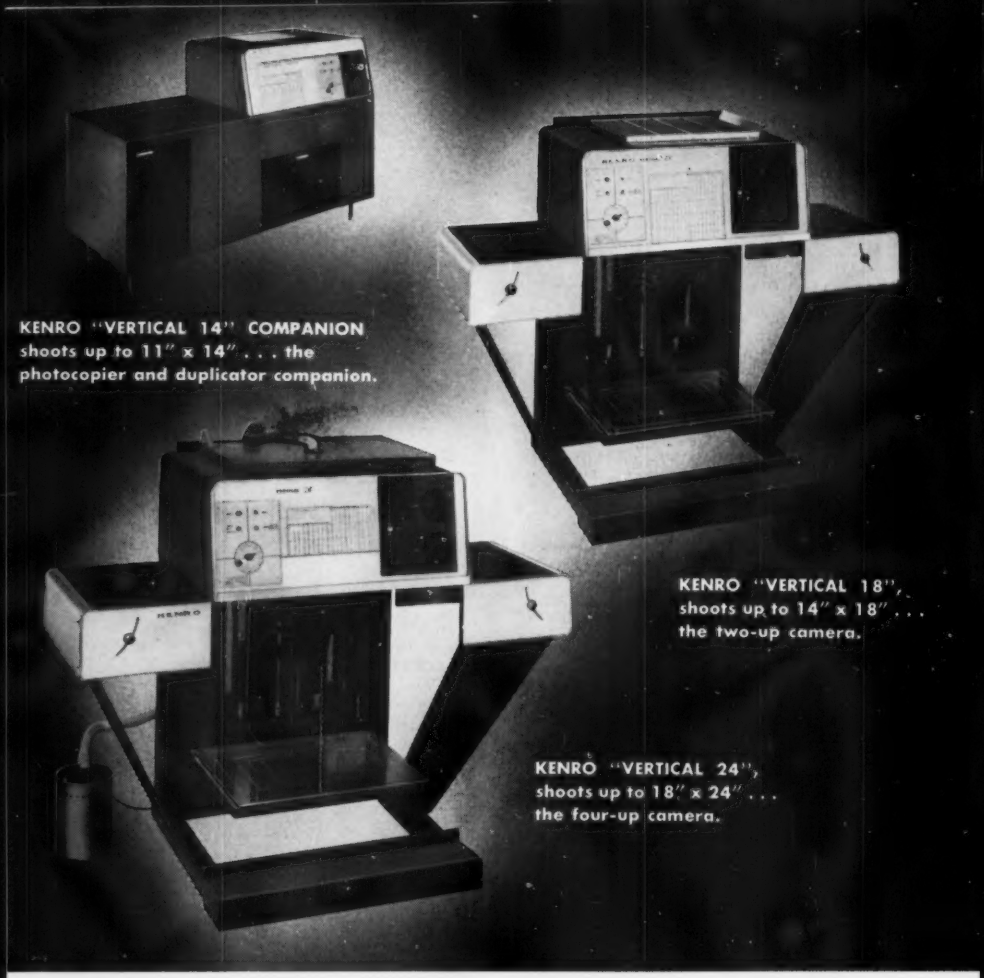
City _____ *Zone* _____ *State* _____

For More Information Circle No. 233



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All are new, modern, engineered for versatility, accuracy, ruggedness and ease of operation. All have new features that improve production and broaden usefulness for every application.

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Write for all the facts on Kenro Cameras and related accessories Then you'll know which Kenro fits your requirements best.

KENRO GRAPHICS, INC. Dept. F-7, Cedar Knolls, New Jersey

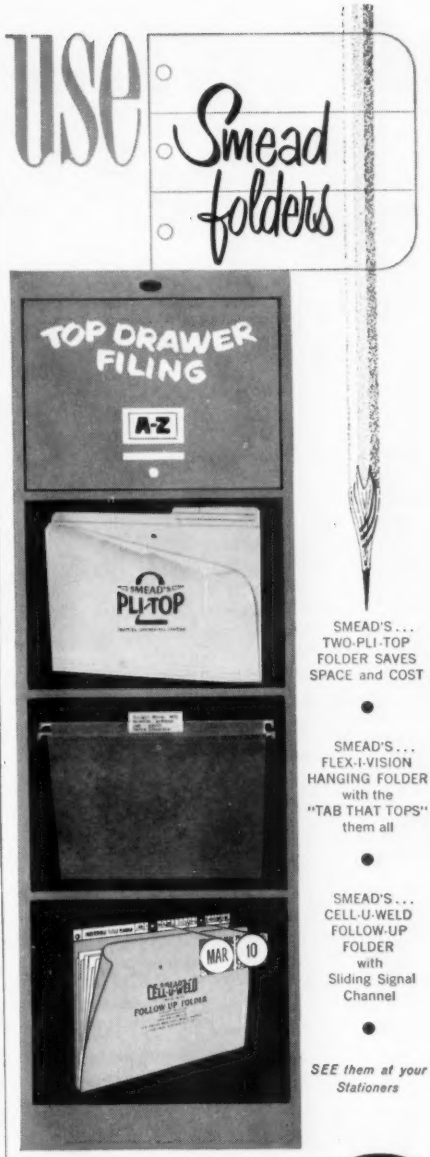
For More Information Circle No. 215

Premier supplies a printed detail tape for immediate accounting. For organizations with their own data processing equipment, the data on punched tape may be programed and analyzed within the firm. Smaller firms can use a service bureau to get speedy, low-cost analysis and reports. Price of the complete unit is approximately $2000. Delivery within 120 days. **For More Information Circle No. 112.**

PAPER CUTTER

Martin-Yale, Inc., 2100 W. Fulton St., Chicago 12, Ill., offers the Premier Ream Cutter with a new center supported guide (back stop) that travels on a ground and polished shaft. This method of gauging the paper enables operator to achieve greater accuracy, efficiency and paper

rigidity with less strain and fatigue. Designed and styled in modern motif, the unit is finished in a gray that blends with any office decor. Paper up to 2″ thick and 18″ wide is cut cleanly, accurately and quickly. Efficiency is assured by the high ratio handle design, allowing anyone to operate the cutter. Overall size is 26″ x 26″. Cutting scale is calibrated in 1/16″ increments. Automatic handle lock prevents blade from operating until operator releases safety catch. Precision-ground tool steel blade is locked in position, yet removable for sharpening. Under normal use, blade serves without maintenance for



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For More Information Circle No. 317

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The NO. 800 JET TRIO EXECUTIVE DESK SET

Unusual and attractive Jet Eraser Set. Contains one each Nos. 825, 827 and 838 Jet Erasers, with refill for each. In attractive, convenient size, transparent polyethylene case.

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World's Foremost Eraser Specialists

Finest Quality for the Finest Erasing

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Correct Mistakes in Any Language

For More Information Circle No. 349

many years. The Ream Cutter is designed for use in offices, printing plants and schools, where a low cost, safe and economical method of paper cutting is required. Complete unit is $249.95. A heavy duty stand is available at $29.95. For catalog sheets and price schedules, **Circle No. 127.**

ROTARY FILES

Columbia, 56 Ave. Marceau, Paris 8, France, specialists in the manufacture of rotary files, announces the improved electric Rol-Star file which is made to order (at no extra cost) for all card sizes.

A stabilizer holds card trays in horizontal position and unit operates in both directions, forward and backward. A clutch release allows the file to be operated manually. Files can be equipped for use with visible file cards. Rol-Star files are made to hold from 5000 to 60,000 cards. **For More Information Circle No. 120.**

BALLPEN

Gardner Stamp Co., 166 S. Washington St., Wilkes-Barre, Pa., announces that its Super-Riter Office Pen is now made with an extra fine point (.025") for fine writing requirements such as charts, small ledger card posting, etc. In addition, Formulabs pre-tested inks are used in all pens, in four

New efficiency inside · New styling outside
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The Champion's exclusive Posi-Contact exposing process gives flat-bed copy quality with all the speed and convenience of a rotary copier. There's no dial adjustment for 96% of all copying. Costly paper waste vanishes. That's why Copease quality costs less. In-use tests prove that the Champion copies more economically than *any* other copier that copies everything.

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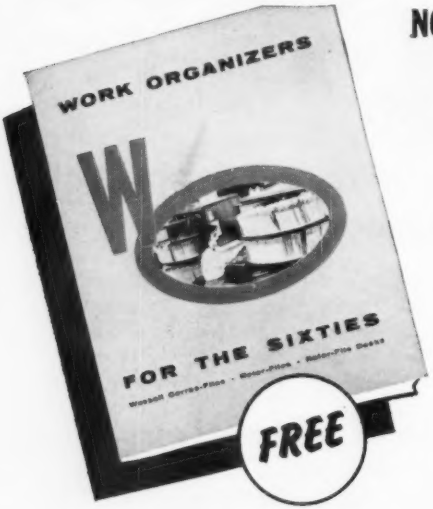
For More Information Circle No. 395

colors: red, blue, green, black. Pens also contain all-brass 5¼″ ink cartridges, and are shipped prepaid anywhere in the U. S. with a moneyback guarantee. Retail at 39c each. A gross cost $28.50 and two gross are $24 per gross ppd. **For More Information Circle No. 166.**

COVERED CLIPBOARD

American Thermoplastic Co., 425 First Ave., Pittsburgh 19, Pa., has developed a clipboard with a cover and two extra pockets that keeps papers covered, private and clean. Pockets hold extra papers, booklets, manuals. Made of virgin vinyl with electronically bonded seams over heavy binders' board, it has sure-grip clip. Available in a wide range of attractive

colors. Price, which includes one-color printing, is 95c in 1000-lot quantities. Smaller quantities slightly higher. **For More Information Circle No. 126.**



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—National Machine Accountants Association, January 1960

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—Office Equipment Manufacturers Institute, September 1959

WASSELL ORGANIZATION, INC. DEPT O-7, WESTPORT, CONN.

For More Information Circle No. 319

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Accuracy is built into the Phillipsburg Inserter with precision machined parts and skilled workmanship. Accuracy that adds up to trouble-free mail handling. Large mailing staffs, overtime wages and the human errors of hand mail fulfillment are eliminated.

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Phillipsburg's full detection system prevents feed failures, double feeds and jam-ups. The double document detector stops the machine if double inserts are pulled. An envelope censor double checks after inserts have been placed in envelopes. Even using a Phillipsburg just a few hours a month will produce savings of 80% and more.

Send for the Modern Mailing Through Mechanization brochure

HAVE YOU CAUGHT UP WITH AUTOMATED MAIL PROCESSING? In one continuous sequence the PHILLIPSBURG INSERTER ***Gathers . . Nests . . Opens Envelope Flaps . . Inserts . . Moistens, Closes, Seals Envelopes . . Imprints Postage . . Counts . . Stacks up to 6,000 Pieces of Mail an Hour***

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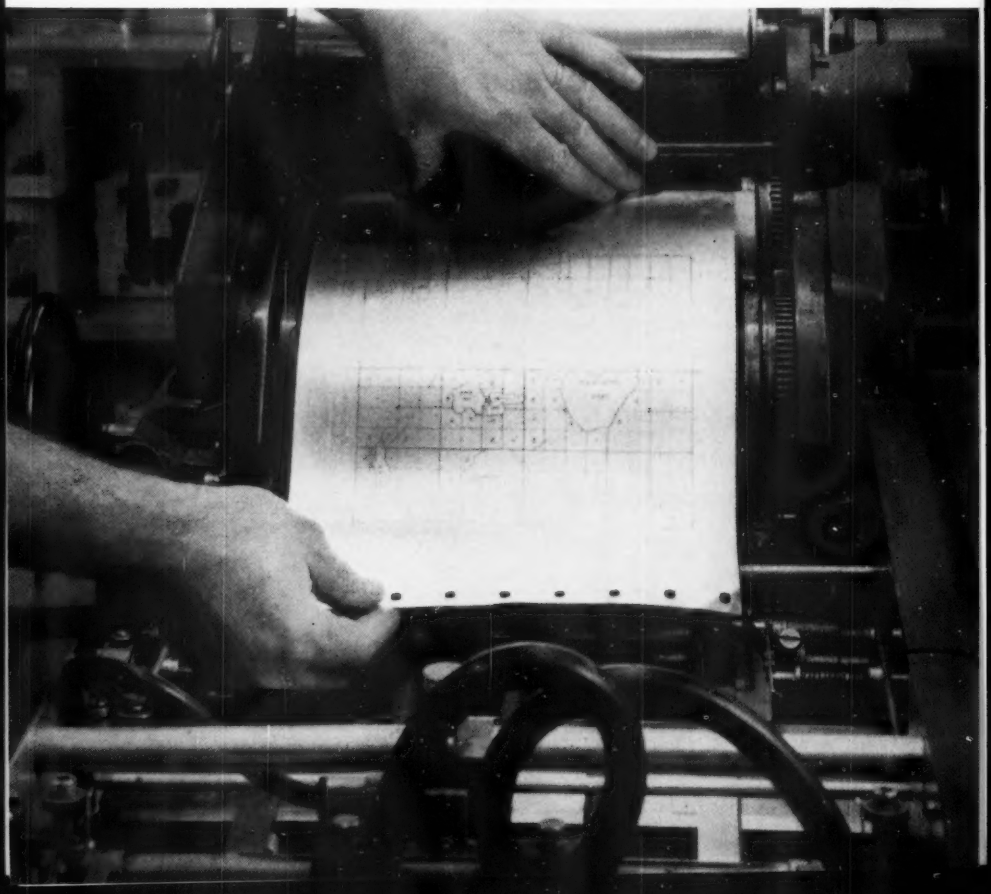
For More Information Circle No. 296

New 3M BRAND type "L" photo offset plates complement your craftsmanship . . . give you all the advantages of an aluminum printing surface at a cost comparable to paper, plastic plates

From 3M research comes a completely new kind of plate for offset duplicator presses. Designed for runs to 5000 in line, halftone, and color, this low-cost plate has two usable sides of aluminum. It's processed quickly, simply—in one step. You have all the advantages of smooth-surfaced metal plates—including the cleanest possible runs! It resists scratches and fingerprints . . . virtually eliminates halation . . . rolls up fast . . . makes additions and deletions simple. Like all 3M Plates, Type "L" is pre-sensitized with precise quality control. Try it soon!

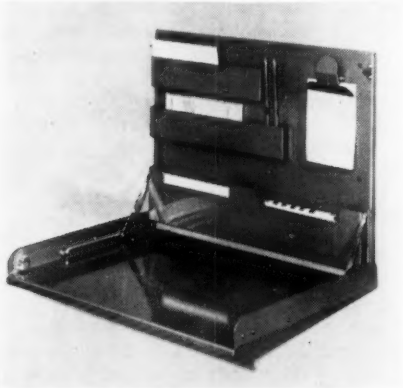
3M PRINTING PRODUCTS DIVISION

MINNESOTA MINING AND MANUFACTURING COMPANY
. . . WHERE RESEARCH IS THE KEY TO TOMORROW



FOLDING WALL DESK

Budget Buddy Co., Box 5323, Kansas City 31, Mo., makes the Fold-Up wall desk, a convenient stand-up location for



paperwork. Protruding less than 3″ when folded to the wall, unit has handy pockets for forms or cards; 16″ x 20″ writing surface. Pencil and note pad are always handy. Desk flips up flat against the wall, pulls down easily for instant use. Package includes wall mounting anchors. Available in gray, green and blue hammertone baked-on enamel. Price is $19.95. **For More Information Circle No. 119.**

PROPELLING LEADHOLDER

Alvin & Co., Windsor, Conn., announces the Mark V Fine Line automatic propelling lead pencil. Modern in design, it supplies an ever-pointed extra thin lead (.031″) and is suited for use with lettering

guides or templates. As easy to write with as an ordinary pencil, yet affords years of dependable service. It is 6″ long and weighs less than ½ oz. The non-rolling hexagonal barrel fits the hand with a knurled, tapered finger tip. For easy, one

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For More Information Circle No. 318

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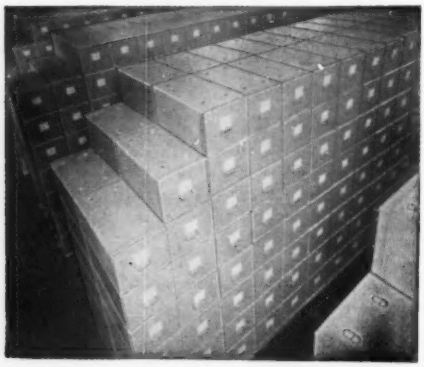
A. LOW-COST "CONVOY" STORAGE FILES!



All your semi-active or inactive records are instantly available. What a time and money-saver today!

Rigidized permanent Drawer and Shell construction eliminates shelving and costly searching (the biggest item).

All this at half the cost of steel because "CONVOYS" are heavy duty corrugated board processed to remarkable strength.

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For More Information Circle No. 320

CONTACT SCREENS

The Universal, a new, improved gray contact screen, shoots faster, gives more contrast if desired, and better tone values. For reproducing photos on photocopiers having a flat-bed exposure section.

Rulings: 32, 45, 55, 60, 65, 75, 85, 100, 110, 120, 133, 150, 175, 200, 250

Sizes: 8 x 10 to 23 x 29 in.

Pre-angled screens to 23 x 29 in.

Write for new literature.

CAPROCK DEVELOPMENTS
165 Broadway, N. Y. 6 **REctor 2-4028**

For More Information Circle No. 321

hand operation, it has a quick-acting, push-button lead feed (breech-loaded through top). Pencil comes in jet black finish, with color coded caps indicating degree of lead hardness. Available in two models, Mark V standard at $1.75, and Mark V-P special pocket model, 5¼" long with pocket clip at $1.95. Each leadholder comes with six extra refill leads. Refill leads are available in 3B, 2B, B, HB, F, H, 2H, 3H, 4H. **For More Information Circle No. 143.**

ADHESIVE

Tri-Tix., Inc., Port Washington, Wis., offers 99 Cement which forms a permanent bond with just one coat and dries flat. Recommended for gluing paper, cloth, leather, felt, ribbon and other fabrics, 99 Cement does not soak through any material and dries flexible. While it has some

of the qualities of rubber cement, it contains no rubber. It is guaranteed not to stain paper, photos, blueprints or any material. Due to its high solid content, it covers twice the area of rubber cement, yet has the same quick-sticking, easy-cleaning advantages. It is also said to be waterproof, weatherproof and sunproof. The cement is offered in 2 oz., 4 oz., and 8 oz. glass bottles with a brush in the cap; and pint, quart and gallon tins. For free sample, **Circle No. 153.**

automation comes to office dictation!

New, talk-triggered

UHER Universal

Dictation—Transcribing Tape Recorder

A must for the busy executive. With optional AKUSTOMAT . . . it's talk-triggered! Starts and stops at the sound of your voice—there's no waste of tape. Just place the microphone on your desk and the Uher Universal will do the rest. It takes dictation, picks up conferences, brain-storming sessions, anywhere within fifty feet, even picks up telephone conversations . . . and the quality of sound reproduction is outstanding. It's economical too—at 15/16 ips, it provides 8 hours of recording on a single 5″ reel—eliminates constant, time-consuming changes.

Now, hand operate the microphone. All the controls are at your fingertips: Flick it stops, click it starts, rewinds, pauses . . . and the eraser is right in the microphone. With optional slide projector synchronization, the Uher Universal is an invaluable tool for sales meetings, demonstrations, etc. This versatile performer doubles in brass as a high fidelity tape recorder—provides magnificent reproduction at all 3 speeds—15/16, 1⅞, 3¾ ips.

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Addresses Directly from Card Files

Writes Headings On Work Sheets Accounting & Tabulating Forms

INDISPENSABLE FOR
MANY OFFICE ADDRESSING & DUPLICATING PROBLEMS.

Anyone can use the ZIP-O-RITER which prevents copying errors. Addresses or duplicates without plates, inks or costly machines.

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MANAGEMENT QUESTIONS
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2. *What are the 7 marks of a Useful Report?*
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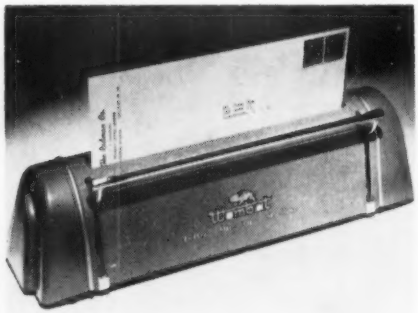
For More Information Cirrle No. 323

LETTEROPENER

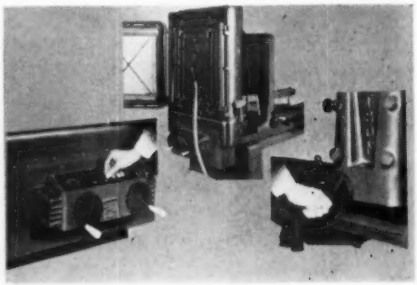
Redman Co., 6026 N. Cicero Ave., Chicago, Ill., announces the fingertip control Wombat letteropener which has a self-sharpening blade that automatically aligns and opens 40-50 letters a minute without mutilating contents. It can handle any size envelope up to 9¾". The Wombat retails at $29.95 and is designed for small



and medium-sized offices. Comes with smart chrome trim and attractive finish suited to any office decor; has rubber feet to prevent sliding and marring; is of all metal construction; and is made to 2/1000" tolerance. No skill is needed to operate it and there is said to be no possible way to get hurt or cut. **For More Information Circle No. 113.**

CAMERAS & EQUIPMENT

Robertson Photo-mechanix, Inc., 7440 W. Lawrence Ave., Chicago 31, Ill., announces that a silicon paint is now being used on its line of cameras and photo-



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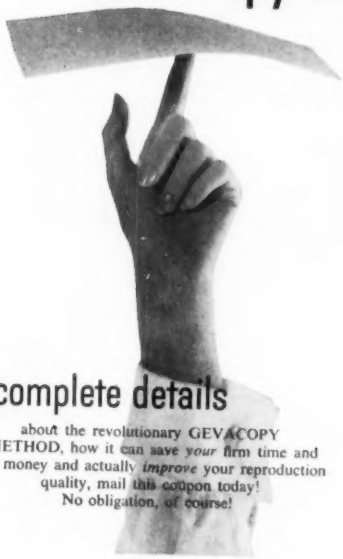

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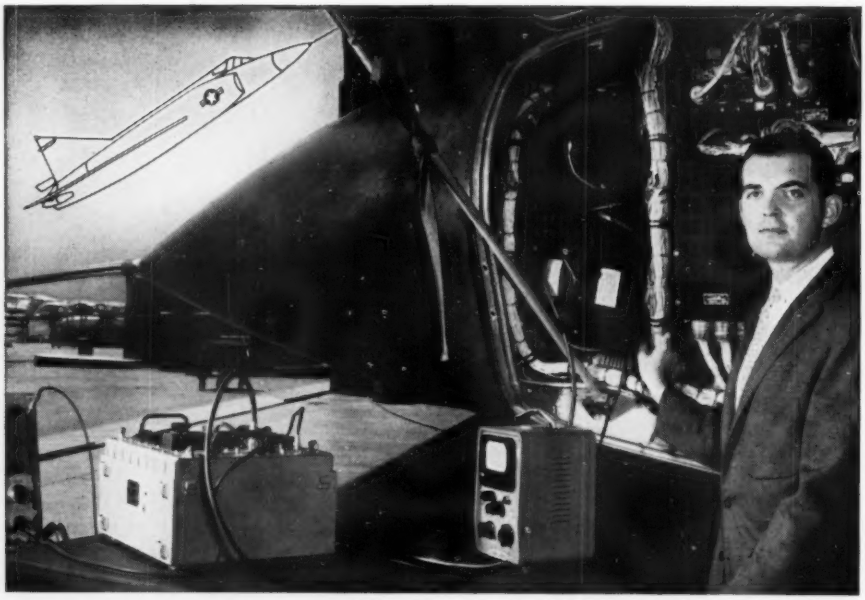

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Mr. Edgar King, BSEE, shown above, Field Engineer for Hughes Aircraft Company, is one of 300 technical consultants to the U. S. Air Force organizations. These Hughes Engineers travel all over the world in the performance of their duties.

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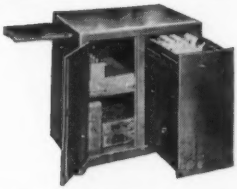
For More Information Circle No. 294

mechanical products. The baked finish of this gray paint protects against corrosion and attack by acids or other foreign matter. The slick finish repels dust and is easily wiped clean with a rag. It is nonreflective and will not produce flare or interfere with normal photographic processes. Robertson has also restyled its control handles, to improve operator comfort, ease of operation and appearance. Certain other camera components have been restyled, such as the instrument panel on the Comet and 480. **For More Information Circle No. 121.**

STENCILING KIT

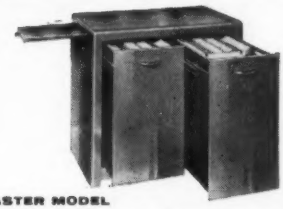
Bow Enterprises, Cages Bend Rd., Gallatin, Tenn., offers a complete and fully integrated stenciling kit with letters, numbers, paints, brushes and several other components. Called the Bow Stenciling Kit, it is useful for labeling and identifying equipment, preparing signs or addressing crates and packages. One advantage is that it carries sufficient quantities of everything required for the job and eliminates the need to replenish supplies often. The kit includes brass interlocking stencils, quick drying paints in quantity, enamel trim paint, stencil cleaner, a variety of brushes for flat work and touch ups and several other items. The interlocking brass stencils are easy to clean for re-use

change from a pile to a MIM-E-O FILE!



COMBINATION MODEL

Three Cabinets in One: Machine Stand, Supply Cabinet and Offset Plate or Stencil File, 400 Capacity.

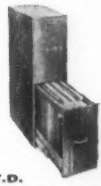


MASTER MODEL

Provides additional work-space, two pull-out drawers. Filing capacity 800 Offset Plates or Stencils.

ROLLAWAY MODEL

Ideal for average filing requirement. Filing capacity 400 Offset Plates or Stencils.



U.T.D. 2-DRAWER MODEL

The "space-saver", in an area of only 13" x 28". Filing capacity 1400 Offset Plates or Stencils.

For information on the MIM-E-O method of filing — see your Duplicator dealer or write

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MT4 — WITH LOCKING DOORS

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For More Information Circle No. 350

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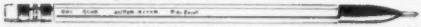
For More Information Circle No. 352

How You Can SAVE MONEY using Gardner's SUPER-RITER Office Pens



Precision engineered .025 Extra Fine Ball Point. All Brass 5¼" long ink cartridge. Light, slim, comfortable —like a pencil. Formulabs® pre-tested quality ink flows smoothly, evenly. Black, Red, Green, Blue Ink. Outstanding performance. Praised by Accountants, Auditors, Bankers, Bookkeepers, Secretaries. For Ledger Cards, Visible Records, Figure Work, Charts, Fine Writing. And talk about Economy! We pay postage anywhere in USA. Your NET Cost is:

each		.39c
1 dozen		$3.25 per dozen
3 dozen	Colors may	3.10 per dozen
6 to 11 doz.	be assorted	3.00 per dozen
1 Gross	in doz. lots	28.50
2 Gross up		24.00 per gross

If not completely satisfactory in all respects, return within 10 days after receipt of pens and your money, plus postage, quickly, cheerfully refunded. You can't lose. That's fair enough, isn't it? Now, buy in quantity at wholesale prices, and really $AVE. Order from:

GARDNER STAMP COMPANY
166 South Washington St., Wilkes-Barre, Pennsylvania

For More Information Circle No. 353

and, as they are fastened together, make for an easy and neat job. The kit retails at $15.80 for the larger, $9.95 for the smaller. **For More Information Circle No. 129.**

OFFSET PLATE ERASER

Blaisdell Pencil Co., Bethayres, Pa., has developed the 541-T Litherase paper wrapped eraser for correcting offset paper

masters. Comes packed in convenient flip-top dozen box, six boxes to a half-gross Dispensa-Pak. Litherase will not smear, scratch or mar the mat surface. **For More Information Circle No. 133.**

HAND CLEANER

Carter's Ink Co., Cambridge 42, Mass., announces a "cosmetic" jar for its Waterless Hand Cleaner. Made of transparent glass, the jar has a pastel blue-green appearance, the color coming from the hand cream which shows through. Product information and directions are printed in

white, and a black screw-on cover completes the package. Specially prepared for removing stubborn office stains such as hectograph ink, duplicator carbon and grease. Carter's hand cleaner contains lanolin to prevent chapping and keep hands soft and smooth. It is available in 15 and 6½ oz. sizes. **For More Information Circle No. 165.**

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Mod. 8561
Printing Calculator

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Transforms complex calculations into a simple and logical succession of automatic operations

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Distributing Centers in U.S.A.

NEW YORK, Check Writer Co., 565 Broadway
CHICAGO, Import Office Machine Co., 159 N. Dearborn St.
SAN FRANCISCO, Northwest Lagomarsino, 639 Howard St.
LOS ANGELES, Wholesale Business Machines, 7525 Beverly Blvd.
HOUSTON, Adding Machines Distributing Co., 2223 Carolina St.
DALLAS, Wholesale Office Machines Co., 2000 North Lamar St.
LOUISVILLE, KY., Import Business Machines Co., 1503 Bardstown Road.
CANADA distributor: Nauta Bros., 3615 Danforth Ave., Toronto.

For More Information Circle No. 257

DESK ORGANIZER

Evans Specialty Co., Box 8128, Richmond 23, Va., offers the U-Bow desk organizer, an expandable desk rack constructed of sturdy aluminum. It is light, easy to handle, and will expand from 4" to 4 ft. Whatever the requirement—reference books, ledgers, telephone books, catalogs or magazines—the U-Bow adjusts to the correct size to hold items securely, yet folds compactly to fit desk

drawer. It contains eight sections, and measures 7" wide, 9" high. **For More Information Circle No. 117.**

For More Information Circle No. 348

DICTATING MACHINE

Stenocord of America, Inc., 29 Broadway, New York 6, N. Y., claims the one-button control of Stenocord Dictating Machine's mul-

tipurpose microphone permits the operator to exercise full control over every dictatting operation including start, stop, dictating, correction, review and erase. This automatic control of every operation makes the machine

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OFFICE MAILINGS AND MAIL AID® LABELS

Many modern offices have found Mail Aid addressing labels the answer to faster, economical mailings.

There are Mail Aid labels to suit practically any addressing system. Available in perforated sheets of 33 labels, they are manufactured in both single sheets (Dupli-Stickers® or Dupli-Quik®) and carbon-interleaved sets (Dupli-Snap®) designed for use when multiple copies are required. Addresses may be transferred on any of the various types of duplicating equipment, or copied by typewriter or accounting equipment. Your stationer can help you select exactly the right label for your system.

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Firm _____
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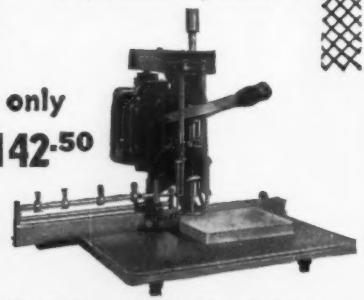
For More Information Circle No. 255

"My Spinnit Paper Drill Paid for Itself in 4 months,"
says small printer.



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Sound, simple machine tool design. Clean holes thru 1" of stock. Chip disposal. Sharpening chuck. Table, 12" x 18", fully adjustable gauges. Slitting and slotting attachment also.

LASSCO CORNER ROUNDER Model 20

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—including one cutting unit. Four shear-action "plug-in" units available: 1/8", 1/4", 3/8", 1/2". Cuts 1/2" of stock. Heavy-duty Floor Model also available.

For complete details write:

LASSCO PRODUCTS, INC.
485 Hague St. • Rochester 6, N. Y.

For More Information Circle No. 327

easy to use. It allows the user to devote his full concentration to the dictating job which must be done at the moment. The microphone may be instantly converted to ultrasensitive pick-up for conference use. These features, combined with the ease of magnetic belt, provide a higher degree of performance and ease of operation. **For More Information Circle No. 122.**

EMERGENCY LIGHT & POWER

American Television & Radio Co., 300 East 4th St., St. Paul 1, Minn., announces its ATR emergency lighting and power units, which permit automatic continuous operation of critical lighting, PA systems and other vital electrical equipment in case of power failure. ATR units feature RF frequency interference suppression, instant starting, frequency stability and built-in power factor correction. They provide

operation of equipment within close to 1/20th of a second after a power line failure, and are designed for quiet long life operation. All models are equipped with ATR heavy duty plug-in type inverter vibrators, having 4-point voltage regulators which make possible the proper output voltage for the power load being protected. Recommended only for use with loads having power factors greater than 70%. To operate lower power factor loads (as low as 50%) additional external power factor correction is required. The ATR charger portion of these units is completely automatic and will maintain the storage battery at full charge,

Imagine...a complete offset duplicating department in a room this size!

One person can handle almost any office duplicating job with this compact, economical Kodak Ektalith Method installation

Team up your offset duplicator with an office camera and new Kodak Ektalith Units . . . make either *photo offset masters* or *direct paper copies* of the widest variety of documents—*enlarged*, *reduced*, or *same size as originals!*

New Kodak Ektalith Loader-Processor ends need for a large processing area or darkroom. Lets you load high-speed Kodak Ektalith Transfer Paper and process it *in roomlight* after camera exposure. Attached Ektalith Transfer Unit puts image on low-cost paper master which gives you hundreds of sharp duplicator copies. Entire process takes less than 2 minutes!

Companion Kodak Ektalith Copy Unit lets you make up to 15 photo-accurate paper copies directly without running duplicator; is ideal for systems work.

Get free booklet

Call local Kodak Ektalith dealer or write Eastman Kodak Company, Graphic Reproduction Division, Rochester 4, N.Y.

KODAK **Ektalith** METHOD ... *puts you ahead in offset*

Kodak TRADEMARK

For More Information Circle No. 250

Situations Wanted—Female

AVAILABLE THE WORLD'S FASTEST STENOGRAPHER

Seeks permanent position. Understands and speaks every language. Will work in large or small office. Perfect for details, guaranteed 100% accuracy.

WORKS 24 HOURS A DAY

Seven days a week

Never late

Never home ill

Needs no instructions

Never forgets anything

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Will travel anywhere without notice

IDEAL BUSINESS PERSONALITY

Very attractive appearance, will never marry, lives only for work ... days, nights, week-ends. Excellent references!

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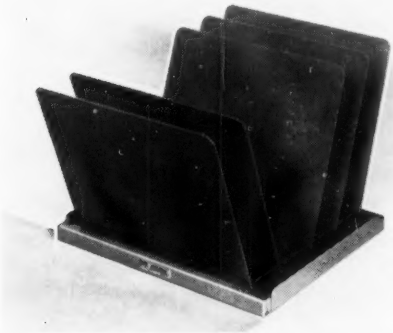
For More Information Circle No. 175

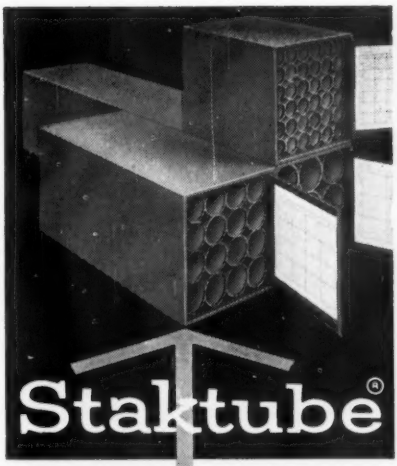
with minimum gassing, from regular 115-volt AC. In case of power failure, it is connected instantly and automatically to the lamps, the inverter portion, or both. The inverter supplies the needed power until commercial power again becomes available, then transfer unit automatically switches protected load to commercial power and turns off inverter and lights. Subsequently, the charger will deliver approximately 6-3 amps. to a 6-volt battery (less to a 12-volt battery) for fast recharging. When battery reaches full charge, charger automatically switches to trickle charge of 100-150 ma. (adjustable) to maintain full charge. All units are housed in gray hammerloid metal cabinets. A complete range of sizes is available up to 250 watts output, to operate from a 6 or 12-volt storage battery. For descriptive literature, **Circle No. 110.**

DESK ORGANIZER

Posting Equipment Corp., 1721 Elmwood Ave., Buffalo 7, N. Y., makes the Tilt-O-Rack desk organizer that provides greater visibility from both sides to give an "easy working desk." This speeds filing because material can be quickly dropped

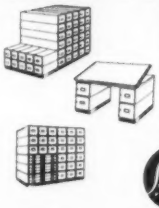


into proper position. Refiling is simplified since organizer stays open automatically at point of reference. Adjustable tilt plate dividers with lock-in device eliminate the customary locking rod. This permits plates to be quickly removed or reinserted to avoid crowding. Avail-



Stacor's lifetime steel

ROLL FILE SYSTEM



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For office files—and briefcase portability whenever complete account records are needed for calls on customers. ADVANCO Compressor-Clip (no wires, no coil springs) bulldog-grips 1 to 150 papers, easy to insert and remove. Works with fingertip pressure.

No need for time-taking paper punching, so no holes that can tear. Tough, 25 pt. pressboard folders. Choose red, gray or black; letter or legal size. *Modern loose-leaf binding, moderately priced.*

If your stationer does not carry ADVANCO Punchless Paper Holders, accept no substitutes. Write us, giving stationer's name. Coupon below for your convenience.

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Send complete data on Advanco Punchless Paper Holders. Our stationer is

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YOUR NAME .....

FIRM NAME .....

CITY ..... STATE .....

For More Information Circle No. 326

able in metallic gray, Tuscan tan and mist green. Price $12.50. Extra tilt plates $1 each. **For More Information Circle No. 142.**

TYPEWRITER DESK

Maso Products Div., Interstate Metal Products Co., 666 Lake Shore Drive, Chicago 11, Ill., has added a modular desk unit to its office furniture line. Suitable for secretary, reception, sales, etc., this space-saving unit has a swing-out

typewriter shelf with a sturdy supporting pedestal. Base and drawers are steel. Top of wood grained laminated plastic is burn- and stain-resistant. Decorator color combinations available are walnut or teakwood grained top with beige and fawn brown bases. **For More Information Circle No. 140.**

MICROFILM SPLICER

Hudson Photographic Industries, Inc., Irvington-on-Hudson, N. Y., announces a simplified microfilm splicer utilizing a pre-cut, adhesive coated Mylar tape to form a transparent, permanent butt splice. The Quik Splice tape forms a bond which is as strong as the film itself and remains flexible and optically clear. The splicer is constructed of diecast aluminum with stainless steel cutting blades and film alignment pins. Each splicer has a built-in tape storage compartment with a hinged cover. The film plane remains constant for perfect focus throughout the spliced area. Torn or damaged film may be repaired without cutting or removing any

NEW OZAMATIC 60

Direct Copy Machine handles up to 1,000 copies an hour...at less than a penny a copy

Now! There's a Direct Copy Machine that turns out more work with increased quality—the new Ozamatic® 60! Zips along at a brisk 40 feet per minute—turning out perfect copies every time, even with inexperienced operators. For example: the new Ozamatic 60 handles originals up to 15 inches wide, and automatically separates each original into a specially engineered receiving tray, while directing copies into the developer. It's a feature found only on far more expensive models! The 1200-watt quartz lamp gives perfect uniformity of exposures. And—you can even copy photographic films without the slightest chance of damage! These are just a few of the literally hundreds of copying benefits you can get from the new Ozamatic 60. Demonstration? Contact your local Ozalid representative, or write for descriptive brochure to: Ozalid, Johnson City, New York. A Division of General Aniline & Film Corp. OZALID

For More Information Circle No. 225

SPEED YOUR TYING

TIE LETTERS, PARCEL POST, CHECKS, BOXES, CIRCULARS, LABELS, PRINTED MATTER AND THOUSANDS OF OTHER ITEMS *10 TIMES FASTER* *with an*

AUTOMATIC PAK-TYER

Easy to operate and maintain. This speedy **ALL-PURPOSE** tying machine is designed to tie any size or shape package tight without adjustments. The knot is slip proof. Saves time and twine. Several models to choose from.

LET FELINS SOLVE YOUR TYING PROBLEMS. WRITE FOR CIRCULARS NOW.

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For More Information Circle No. 328

FREE DIES AND PROOFS
GENUINE ENGRAVED LETTERHEADS $15.00 FOR 1000
Genuine ENGRAVED BUSINESS CARDS
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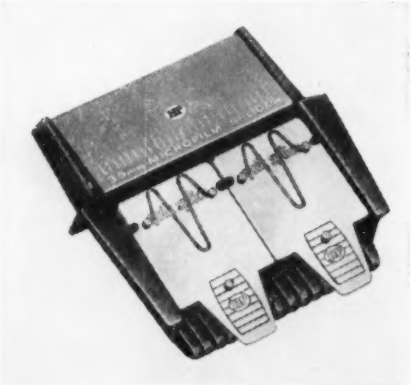
MANUSCRIPT COVERS 100 FOR $3.00
CLIP YOUR LETTERHEAD TO THIS AD... MAIL FOR FREE PROOF
DEALERS WANTED
DEWBERRY ENGRAVING CO.
807 SO. 20th ST., BIRMINGHAM 5, ALABAMA

For More Information Circle No. 329

frames. No skill is required to operate the splicer and complete operation requires only 30-45 seconds. The 35mm

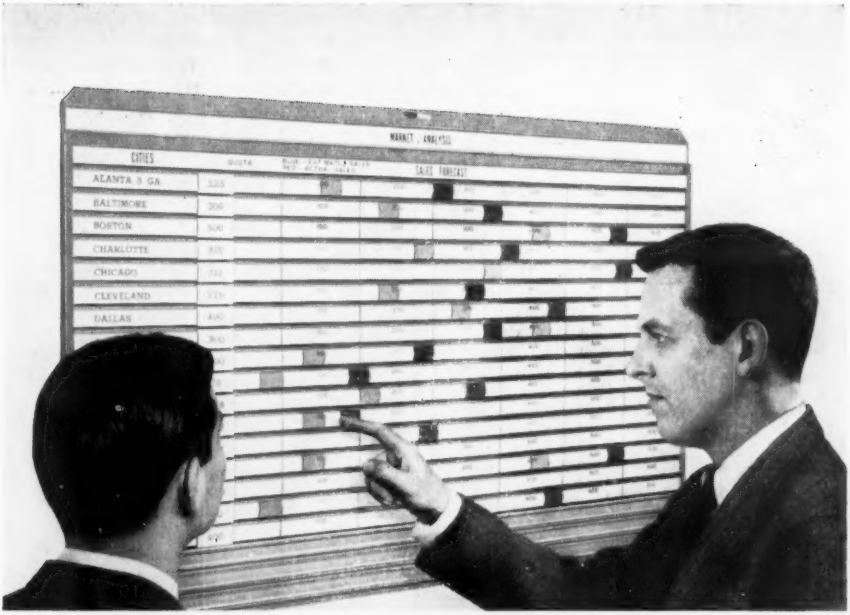


Quik Splicer lists at $14.50. 35mm Quik Splice tape in dispenser packs of 100 splices costs $2.50. **For More Information Circle No. 134.**

UTILITY CART

Bay Products Div., 1801 W. Cambria St., Philadelphia 32, Pa., has designed a cart for general office and library use.

Postless construction keeps the entire shelf working area clear. This allows free movement of any material on or off the shelves without becoming caught behind post or



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Colorful ACME VISIBLE Control Panels adapt to your exact needs . . . save paperwork, step up efficiency, prevent costly oversights. Unlimited signaling and charting possibilities. Snap-on, transparent colored signals flag due dates, reorder levels, quotas, goals. Complete flexibility. Signals smoothly slide entire length of tube . . . override or by-pass others. For more facts, mail coupon today.

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For More Information Circle No. 290

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choice of colors for:

DISPLAYS
CONTROL BOARDS
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For More Information Circle No. 343

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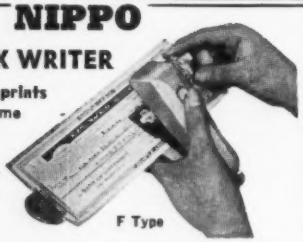
Indelibly prints Just the same as a big machine costing up to $500.—



F Type

NIPPO MACHINE INDUSTRY CO., LTD.
Tenjin-cho-Nishi-ku, Yokohama, Japan

For More Information Circle No. 344

NOTICE TO H.B.B.

It's a good idea. I'm keeping it in my Columbia File.

Send for catalog and name of dealers in your area. Columbia-Hallowell Division, Jenkintown 88, Pa. or SPS Western, Santa Ana, Cal.

For More Information Circle No. 345

another FIRST with FASTER SERVICE for YOU, the dealer . . .

ROGERSNAP RUSH-UP 24 HOUR QUOTE SERVICE

. . . on custom snap forms!

If you have been confused by complex ORDER FORMS, PRICE SHEETS, QUOTATION RESPONSIBILITIES — plus the LONG WAIT for confirmation, send for our NEW EXCLUSIVE "RUSH-UP 24 HOUR QUOTE SERVICE" kit for dealers! (contains NEW INFORMATION SHEETS, STICKERS and AIR POSTAGE GUARANTEED ENVELOPES).

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For More Information Circle No. 346

shelf flanges. There are no exposed, bolts or nuts. Recessed tubular handle provides full control with 5″ rubber tread casters. Construction is all steel finished in light gray baked enamel. Overall dimensions are 15″ wide, 30″ long, 45″ high. Clear opening between shelves is 13″. **For More Information Circle No. 108.**

BOX FILE

Amberg File & Index Co., Kankakee, Ill., announces the 990 Box File, made of sturdy binder's board and covered in black leatherette with gold trim for placement in offices where appearance is important. It has a hinged front flap and lid, and

fastens with a sturdy, luggage-type clasp. Indexes are medium weight file folder manila, alphabetized into the 17 most commonly used divisions. They are held in place by a strong, center index rod holder, reinforced top and bottom. **For More Information Circle No. 105.**

MARKER

Sanford Ink Co., Bellwood, Ill., announces a marking instrument that writes on any surface in waterproof ink that flows and dries instantly. It is available in eight colors: black, brown, red, orange, yellow, green, blue, purple. The Sanford Felt-Tip Marker's barrel is of a size and shape for comfortable handling, and the ink formula permits instant writing even if the cap has been left off a long time. There is only one place where evaporation can occur and this is covered by a snug-

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Removes background tone from Xerographic Masters.
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For More Information Circle No. 241

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ANYONE CAN OPERATE the **NEW HOMS M14 All Purpose 14½" Paper Cutter** easily, accurately and in complete safety. Precision engineered, the Model M14 has features matched only in higher priced cutters . . . such as: automatic safety device, heavy duty paper press, full length side guide, full width adjustable back gauge and two permanent rules so that back guide may be set and locked for any paper size required. **See your dealer TODAY!**

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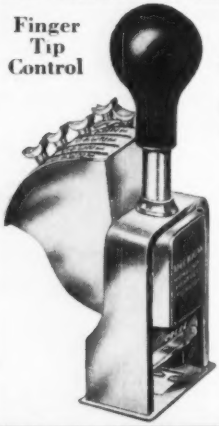
BURLINGAME, CALIFORNIA

For More Information Circle No. 337

AMERICAN SPEED SET
Gear Construction Numbering Machines

Finger Tip Control



Model 43

Wheels engraved with figures, letters, fractions, words, etc.

Any Number Quickly Brought Into Printing Position

WRITE FOR SPECIAL FOLDER

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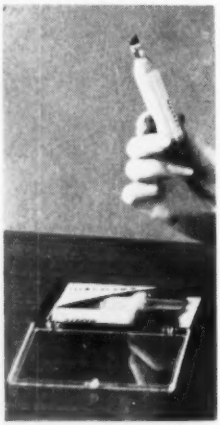
ATLANTIC AND SHEPHERD AVENUES
BROOKLYN 8, NEW YORK
BRANCH—105 W. MADISON ST., CHICAGO 2, ILL.

For More Information Circle No. 338

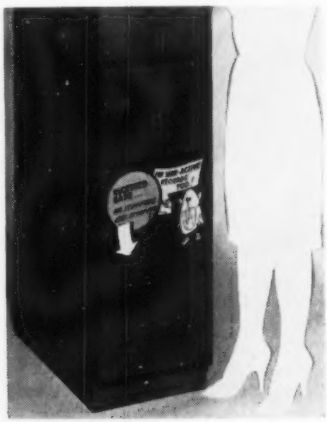
fitting nylon cap. The marker is available in three different packs: blister-mounted on a selling card, 12 cards on a wire stand



for counter or pegboard display; 12 markers, not carded, in a shelf box; and a 4-color set. **For More Information Circle No. 132.**

TRANSFER FILE BASES

Convoy, Inc., Station B, Box 216-H, Canton 6, Ohio, offers 3"-high recessed bases for letter and legal size transfer



files. The additional height increases accessibility of contents and saves back-bending, stooping and crouching. The re-

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Genuine U. S. Silver Dollar in heavy Lucite

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We'll give you a beautiful and unusual Silver-Dollar Paperweight, just for seeing this happen on typical figuring jobs of your own. See how a fast-stepping Marchant calculator would slash costly overhead for you.

There's a Marchant model specially designed for your kinds of figuring, and it is easy to own on your choice of a variety of time-payment and leasing plans. Generous trade-ins, too.

World's fastest desk calculator

A Marchant calculator operates at twice the highest speed of any other calculator. The fully automatic ***transflo*** model, illustrated, also has an exclusive transfer key that eliminates many hand operations from chain figuring, such as invoice multiplications followed by discounts and taxes.

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Receive a gleaming, American silver dollar encased in a handsome block of jewel-clear Lucite. No printing or advertising. A distinctive, where-can-I-get-one-like-it conversation piece for your desk or home.

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Fine calculators and adding machines of advanced design

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Oakland 8, California

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Request honored only when made with this coupon, with name and titl filled in and business letterhead attached. Limited stock — offer subjec to supply on hand.

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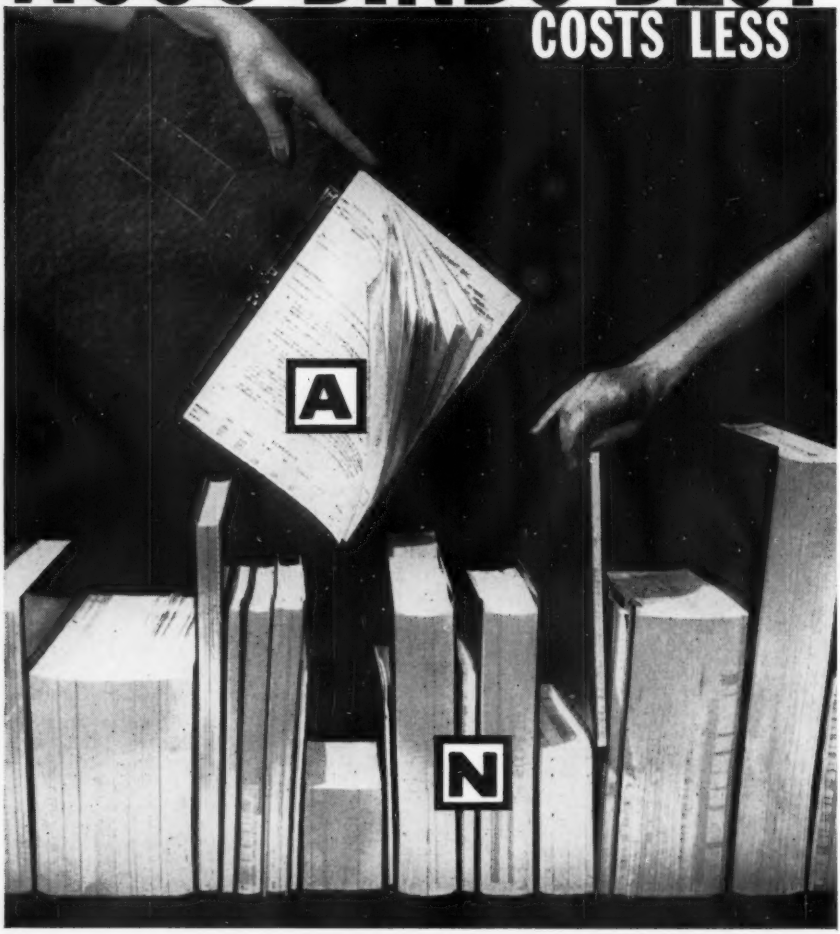
COSTS LESS



Acco binders secure records, invoices, catalogs, safely—papers can't slip out. No needless bulk! Unlike ordinary binders, trim, space-saving Acco binders slim to their contents—whether 1 sheet or 1000 sheets. 5 colors. Many sizes — from 36 ¢ up.

ASK FOR ACCO's new booklet "Ideas That Save Time and Space" —available free at office outfitters.

ACCOPRESS®

GENUINE PRESSBOARD BINDERS

Or write: ACCO PRODUCTS,
A Division of Natser Corporation, Ogdensburg, N.Y. - In Canada: Acco Canadian Co., Ltd., Toronto

For More Information Circle No. 243

® REGD. T.M.

cessed bases allow toe-room, improve appearance of single units of files or multiple batteries, facilitate sweeping and mopping, protect against moisture, mold or floor dampness. In semiactive locations with uneven floors, the bases make bottom drawers as operable as in filing cabinets. Made to hold weight far in excess of any anticipated, of Chem-Board, Convoy's patented process of rigidizing extra heavy corrugated. Retail prices of the bases are $2 for letter size and $2.20 for legal size, f.o.b. above. **For More Information Circle No. 106.**

GLUE PEN

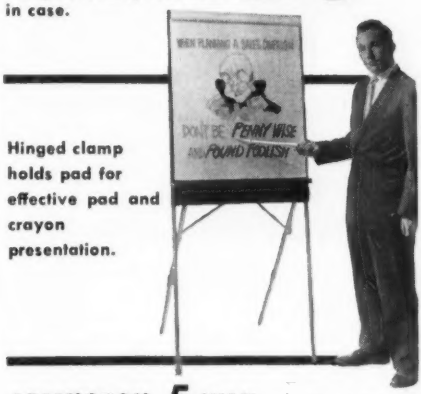
Twining Mfg. Co., 438 Third St., Ann Arbor, Mich., offers the Du-All Glue Pen, a convenient way to dispense glue. Just a dot or two cleanly mounts photos and clippings, seals packages and mounts posters. Pen does not leak, gum up or dry out. It is unconditionally guaranteed by

the manufacturer. Made in a variety of colorful plastics, it comes mounted on a blister-packed card, complete with counter display box. One extra pen included with each dozen for demonstration. The retail price is 98c; three-time refill retails for 49c. **For More Information Circle No. 167.**

TELL YOUR STORY 5 WAYS...

- Paper Pad Presentations
- Blackboard Chalktalks
- Flip Chart Presentations
- Card Chart Speeches
- Flannelboard Demonstrations

Easel, used as chalkboard —folds in a jiffy. Lightweight, easily carried in case.



Hinged clamp holds pad for effective pad and crayon presentation.

ARLINGTON 5-WAY PRESENTATION EASEL $42.50 Less pad

Send for literature

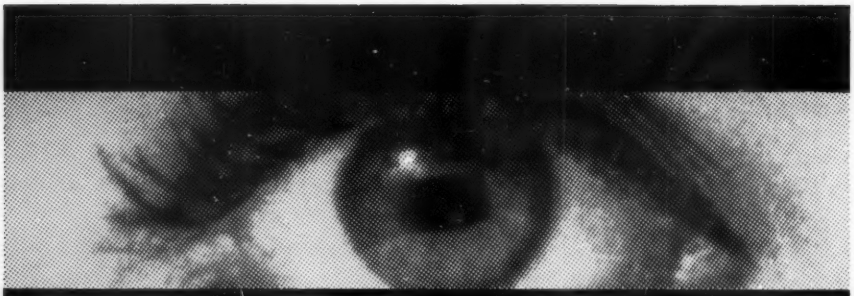
Complete with hinged clamp chalkboard, chalk, eraser.

Four paper pads	$12.00
Flannelboard accessory	7.00
Carrying case	12.50

ARLINGTON ALUMINUM COMPANY

19007 W. Davison • Detroit 23, Michigan

For More Information Circle No. 335



Now! The Only Sure Way To Keep Confidential Papers

ABSOLUTELY SECRET

UNREADABLE SHREDS COME OUT HERE.

Lowest Price Machine on Market!

No surer, faster or safer way to keep confidential papers secret than by positively destroying them. Do it right in your own office with the new Shredmaster Bantam 10. Anyone can use it. Handsome and modern in design, clean and quiet in operation. Now at a new low price. (Other models of greater capacity available.)

FREE: Illustrated, descriptive folder giving details of free trial. Just write today to DEPT. A-7.

THE SHREDMASTER CORPORATION
384 Woodcleft Ave.
Freeport, N. Y.

For More Information Circle No. 291

Literature from the Manufacturers

BUSINESS PAPERS

Fletcher Paper Co., 20 N. Wacker Drive, Chicago 6, Ill., offers a handy reference guide for the convenience of users of Mackinac Job-Ready Business Papers. Printed in three colors on Mackinac

Opaque Vellum, this 12-page booklet describes the seven grades of paper in the line, indicates the process or equipment for which the paper is made and suggests many uses of each paper. The booklet contains much helpful information and is fully illustrated with line drawings and halftones. For a copy, **Circle No. 152.**

ELECTRIC STAPLING

Staplex Co., 775 Fifth Ave., Brooklyn 32, N. Y., deals with the economy and efficiency of its automatic electric stapler in a six-page booklet, "Industry Staples and Saves with Staplex." Photos illustrate how the stapler is used in labelling price tagging, food bagging, stapling of envelopes containing parts, printing, etc. The text emphasizes the simplicity of operating this equipment "which offers practically no maintenance problem. There are no complicated electrical circuits and no motor as it works on simple solenoid principle, using current only during the split second stapling operation." For this booklet, **Circle No. 164.**

OFFSET DUPLICATOR CONTROL

American Type Founders Co., Inc., 200 Elmora Ave., Elizabeth, N. J., has issued a 24-page booklet describing in detail the ATF Program-Matic system control attachment for the 1250 Multilith, ATF Chief 15, and Whitin Masterlith. The Program-Matic is an automatic control attachment that can be installed within an hour on standard offset duplicators. It is designed for systems work, short-runs, repetitive work and work requiring accurate count control. Advantages include single-lever operating control, automatic feed control, versatile quantity control and versatile quality control. All operating positions of selector switch, control lever, memory counter, blanket cleaning, feed control and other production aids are described and illustrated. For the booklet, **Circle No. 148.**

DATA PUNCH

Royal McBee Corp., Westchester Ave., Port Chester, N. Y., describes and illustrates a Keysort data punch in its style sheet S-554. The punch marginally code-notches and simultaneously imprints data on Keysort cards in one operation. Illustrations include sequence of operation. Imprinting and code-notching are controlled by two embossed, light metal plates, the left one carrying fixed or semifixed data and the right variable information. Simplified ribbon mechanism and regenerative ribbon assures legibility. The punch will not operate unless both plates and Key-

sort cards are inserted properly. Machine is light and non-electrical. For this literature, **Circle No. 155.**

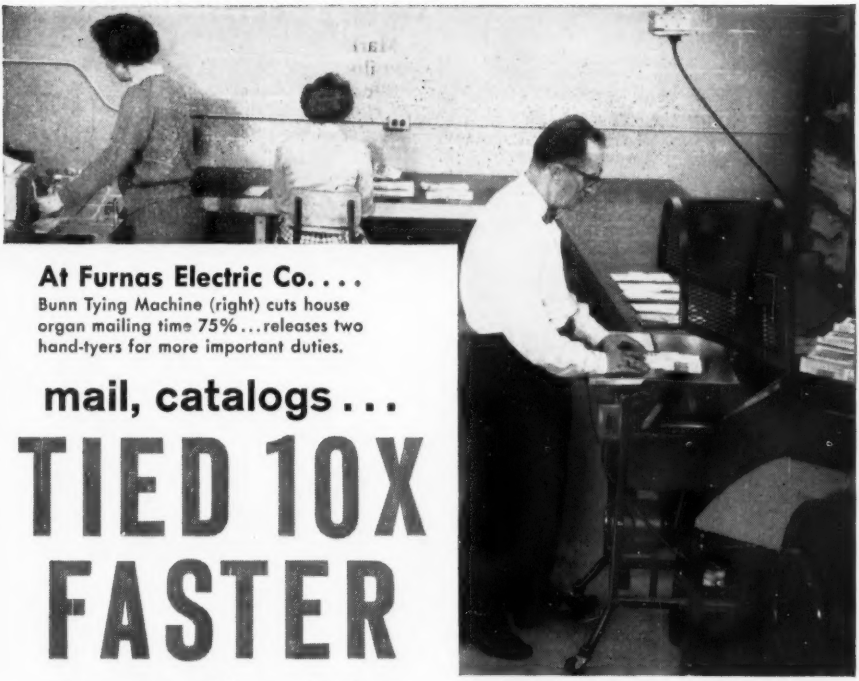
PHOTOCOPIERS

Cormac Photocopy Corp., 80 Fifth Ave., New York 11, N. Y., offers a catalog folder showing its complete line of photocopy equipment and accessories. The catalog highlights the Cormac 500 one-step photocopier with Flo-Matic control that eliminates the need for daily solution handling completely. Also featured is Cormac's Polycopy processor that provides any large number of copies from a master negative at a fraction of cost. The Cormac 18" machine for engineering drawings, etc., Bookprinter and several other basic units and accessories are included. Each machine is clearly illustrated and described with complete information on operating features, throat capacity, electrical requirements and dimensions. A list of Cormac's nationwide dealer and branch service stations is also shown. For a copy, **Circle No. 168.**

FURNITURE

Columbia - Hallowell Div., Standard Pressed Steel Co., Box 917, Jenkintown, Pa., uses the theme "a whole new world of office efficiency" to describe its lines of office desks and chairs in a six-page folder covering the Columbia Meridian collection of executive desks and matching credenzas, and the Nine-to-Five group of modular unit work centers which can be customized to fit individual requirements. Both lines are available in more than 150 two-tone color combinations. Also featured are space-saving Ampla desks. Through replacement of conventional center drawer with two personal drawers in the pedestal, chair push-back area between desks is reduced so that six economy-priced Amplas fit in the space required for five center drawer desks. Columbia standard office desks and extensive line of office chairs round out the folder. Chairs include the Contour Series of economy chairs featuring the Ballerina secretary-posture chair and the standard Columbia chair line. For folder, **Circle No. 149.**

For More Information Circle No. 333



At Furnas Electric Co. . . .
Bunn Tying Machine (right) cuts house organ mailing time 75% . . . releases two hand-tyers for more important duties.

mail, catalogs . . .

TIED 10X FASTER

"Within one year," reports the advertising manager of this Batavia, (Ill.) manufacturer, "our Bunn Tying Machine had repaid its full cost in mail-tying savings alone. And mail-tying is just *one* of the ways we use it!"

Ties anything. Yes, there are many ways you'll save with a Bunn Tying Machine. Catalogs, literature, packages, bundles . . . all sizes, all shapes: the Bunn Machine handles them all with the same speed and ease.

Easy to use. You just position your bundle, then step on a trip. Automatically, you get a neat, tight tie . . . in 1½ seconds or less. Faster than hand-tying? About 10 times. And you get a better job.

Send today for full data on how modern Bunn tying can speed and simplify your tying jobs.

PACKAGE TYING MACHINES—SINCE 1907

BUNN

B. H. BUNN COMPANY

7605 Vincennes Ave., Dept. OF-70, Chicago 20, Ill.
Export Dept.: 10406 S. Western Ave., Chicago 43, Ill.

MAIL THIS COUPON NOW

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Please send free booklet which illustrates how we may cut costs with Bunn automatic tying.

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Company_____

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To be eligible buy an A.W.Faber

ERASERSTIK®

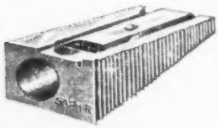
The original grey eraser point —always best for erasing.

—the pencil-shaped white-polished beauty that opens the door to Typing Perfection without SLOPPY STRIKEOVERS.

7099B with brush 20c. 7099 without brush 10c. Insist on the original and genuine EraserStik with the registered trade mark.

SAPHIR Hand Sharpener

works like magic. Gives you the correct point on your EraserStik—then stops sharpening. If you use one, you need the other. Ask your Stationer.



A.W.Faber-Castell

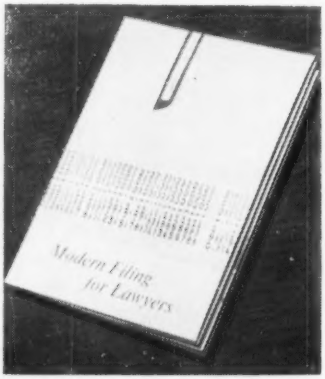
Pencil Co. Newark 3, N. J.

Shaped like a pencil, it sharpens like a pencil to any style point you prefer—blunt, medium or slender.

For More Information Circle No. 325

LAW OFFICE FILING

Tab Products Co., 995 Market St., San Francisco 3, Calif., offers an illustrated 16-page booklet, "Modern Filing for Lawyers." While giving attention to legal filing problems, it contains general information regarding filing principles, as well



as detailed filing facts applicable to almost any office. Among aspects of filing discussed are visibility and accessibility; numerical systems; terminal digit systems; alphabetic systems; alpha-numerical systems; and color coding. For a free copy, **Circle No. 147.**

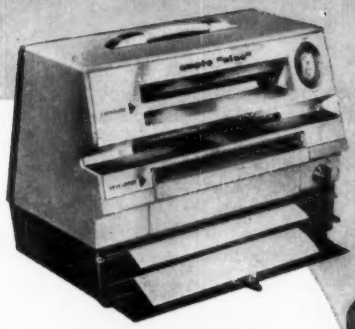
DICTATING

Stenocord of American, Inc., 29 Broadway, New York 6, N. Y., offers "How to be a Dictator," a 24-page booklet in humorous vein, containing many down-to-earth hints and ideas on improving efficiency and cutting cost through proper dictating habits. Planned as an aid to users of all dictating equipment, the booklet is available free of charge. For a copy, **Circle No. 198.**

TIMING SYSTEMS

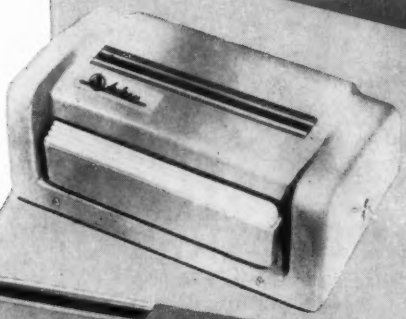
Cincinnati Time Recorder Co., 1733 Central Ave., Cincinnati 14, Ohio, emphasizes the requirement for accurate time throughout an entire office building in a folder with capsule descriptions of the two more widely used systems: wired syn-

For More Information Circle No. 197→



Do YOU have a copying problem?

Then, one of these* Ampto transfer photocopy machines or processors is just right for you!



AMPTO means Quality, Performance, Economy

Ampto also manufactures the most complete line of diffusion transfer photocopy papers and films. Whether it's for routine office copying, engineering drawing reproduction, silk screen or offset printing, Vu-Graph, or the art department, there's an Ampto photocopy machine and paper (or film) tailored to your needs.

**Other models are available for your specific problem.*

For more information — and a free demonstration or consultation arranged at your convenience — contact your nearest Ampto dealer, or write —

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WITH A HANDY

CHALLENGE

PAPER CUTTER

These Challenge Lever Cutters are ideal for duplicator operations or other office jobs particularly where fairly thick piles or large sheets of paper are to be cut . . . accurately.

They are capable of cutting 2½ to 3¼ inches of paper at a single stroke. Four models are available with cutting widths of 19⅜, 23, 26½ and 30½ inches. Both the bench type and stand models are offered.

Also available are easy-to-use Challenge Power Cutters in these same size ranges. For a handy free descriptive booklet on Challenge Lever and Power Cutters and names of local dealers write Challenge. Sold by leading Printing and Duplicator Equipment Dealers everywhere.

PC-114

THE CHALLENGE MACHINERY CO.
GRAND HAVEN, MICHIGAN

For More Information Circle No. 332

chronous and minute impulse. The folder also points out the use of a master program machine to correct and operate the clocks. In addition, the function of the master programer to operate time recorders, bells, buzzers and horns, is described. Title of the folder is "Master Pro Self-Regulating Time and Program Signalling Systems." For a copy, **Circle No. 154.**

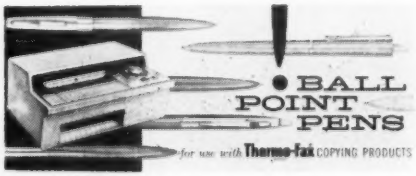
DATA PROCESSING AUXILIARIES

Monarch Metal Products, Inc., New Windsor (Newburgh), N. Y., has issued Catalog No. 4, illustrating and describing its line of data processing auxiliary equipment used with punched card and mag-

netic tape systems. Among the many categories of items illustrated are card punch desks, trays, control panel cabinets, files, storage and mobile racks, sorter equipment; tape handling, housing and storage; trucks, tub files and many other items. For this catalog, **Circle No. 157.**

COPYING BALLPOINTS

Minnesota Mining & Mfg. Co., Dept. SO-216, 900 Bush St., St. Paul 6, Minn., offers a 16-page booklet describing colored



ballpoint pens that can be used with Thermo-Fax copying machines. Listed are more than 150 ballpoint and liquid graphite pens made by over 50 well-known manufacturers, all of which have been rated according to their ability to give clear, sharp reproductions when used with any Thermo-Fax copying machine. The booklet lists a wide range of products in all price ranges and a variety of colors including red, green, blue, black and blue-black. For a copy, **Circle No. 158.**

FURNITURE

Howell Co., Div. of Acme Steel Co., St. Charles, Ill., shows the Encore group of modern metal furniture in its 28-page Catalog No. 30. This slim line furniture has square tubular frames in choice of metal finishes: bronzite, satin chrome, gold and white. Groupings of this furniture are displayed in full color. The quality features are illustrated with specific selling points named. A companion furniture group with round tubular steel

Cut your filing costs with "keyboard" speed of OXFORD PENDAFLEX® equipment!

All Oxford Pendaflex tabs stay visible at all times. A file clerk's hands flit across this "keyboard" selecting quickly and accurately. Results: increased speed and efficiency . . . lower filing costs.

Learn how this and other advantages of Oxford Pendaflex equipment will benefit you! Mail coupon today for a *free* file analysis!

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FIRST NAME IN FILING

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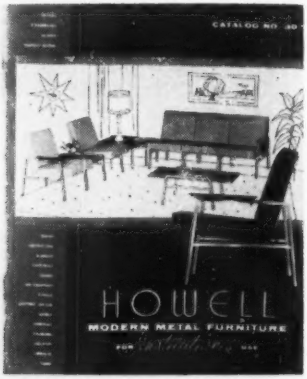
frames is also illustrated in full color. Famous name installations of Howell furniture are shown on many pages throughout the catalog. Several styles of tables



with pedestal bases and four legs are pictured in the catalog. Nine designs of chairs are available to coordinate in bronz-plate, chromsteel and bronzite with tables. For the catalog, **Circle No. 159.**

PRINTING PAPERS

Wausau Paper Mills Co., Brokaw, Wis., announces a printing specimen folder featuring the complete line of Wausau Text printing paper. This folder shows the fine reproduction achieved on this versatile

text sheet, from simple black-and-whites, duotones, line, wash or screen, to full color. Included also are swatches of the many colors, finishes and weights available in this line. For the folder, **Circle No. 156.**

now **increase office efficiency** by measuring productive use of business machines—**automatically**

SERIES TRTJ
TIME RECORDER + TOTALIZER
from **$74.50**

The TRTJ Recorder automatically charts on tape the on-off time of any business machine to which it is connected. Distinguishes between **productive** and **idling** time. Access window permits notation of project number directly on tape. Visual meter shows total productive time. Easily installed from our complete instructions.

SERIES TTJ
TIME TOTALIZER
from **$26.00**

TTJ Totalizer automatically **adds** productive time of any business machine to which it is connected. Visual meter shows total **productive** time in any period. Pilot light indicates when business machine is being used. Easily installed from our diagrams.

FREE
Catalog TJ—how to monitor all types of business machines.

standard INSTRUMENT CORP. • 657 BROADWAY, NEW YORK 12, N.Y.

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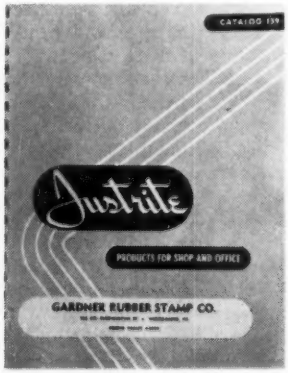
FILING TIPS

Cel-U-Dex Corp., New Windsor, Newburgh, N. Y., offers information on filing methods, systems and equipment in a new edition of its "Modern Filing and Indexing Aids." Some of the points covered include: how to eliminate bottom drawer

squat and squint; how to label office, stock, library and storage shelves for efficiency and permanent visibility; how to provide a three-way nameplate system for desks, information windows, bank stations, counters; how to label the backs of loose leaf books and post binders. For this booklet, **Circle No. 172.**

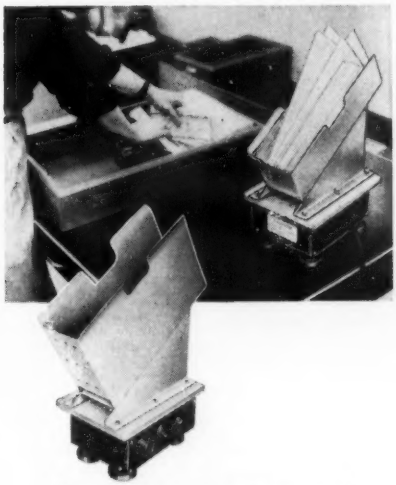
MARKING PRODUCTS

Gardner Rubber Stamp Co., 166 S. Washington St., Wilkes-Barre, Pa., offers a 46-page catalog of marking products for



SYNTRON

Vibrating
PAPER JOGGERS



Save time, money and reduce waste losses

SYNTRON Paper Joggers are the answer to those time consuming jobs.

—preparing mail for automatic opening, aligning scrambled stacks of checks, time cards, punch cards, invoices, sales manuals, purchase orders, etc.

They are easy to operate, require very little space, produce 3600 vibrations per minute—enough to align most paper stock. Designed for efficient, dependable maintenance free service. Available as table deck, divided deck or bin type joggers.

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SYNTRON COMPANY
Quality Equipment Since 1921
715 Lexington Ave. Homer City, Penna.

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Brand new!
PAPER TRIMMER & CUTTER *combined*
CUTS UP TO 50 SHEETS IN ONE STROKE

6 MODELS:
14", 22", 28", 32" and 28" and 32" (foot models)

KUTRIMMER

ALSO CUTS cardboard, fibreboard, foils, rubber, fabrics, leather, linoleum, felt, thin plywood, thin soft metal and many similar materials.

FOR EVERY BUSINESS: offices, plant, shipping, schools, banks, photography, and homes.

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SORT-O-FILE
Reg. U.S. Pat. Off.
SAVES 20% TO 60% TIME
30 Models. Systems Sorting Service
THOUSANDS IN USE
For fast hand-sorting of cards, checks, letters, invoices, orders, business forms or public documents. For collating on the new **Col-A-Tron.** Write for illustrated circulars.
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Representatives everywhere.
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Warehouse: New York, Chicago

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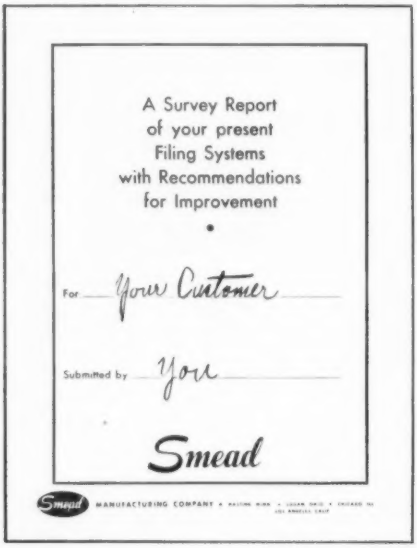
the office, including made-to-order rubber stamps, daters, line numberers, self-inking stamps, office type outfits, rubber bands. For this catalog, **Circle No. 151.**

FILE SURVEY FORM

Smead Mfg. Co., Hastings, Minn., has designed a survey report form to facilitate detailed analysis of the special needs of individual offices' filing systems. Conceived of by the company to enable its salesmen



to improve customer service, the report is in two parts. The first is a ruled sheet for notation of the type and condition of an office's current filing system. The second part provides for recommendation of the system best suited to the office's needs. Both parts, when completed, present a clear picture of the office's filing system, its merits and defects, and give positive indication as to whether or not a new system should be adopted. The back of the report carries illustrations of Smead's Tell-I-Vision and Super System index systems. A list of 14 basic points on filing is included. The forms are available to Smead dealers, dealer salesmen and others. For a copy, **Circle No. 150.**

On-the-Job Instructor

(Continued from page 90)

proper route at every crossroad along the way from this point on into the follow-up. After the general plan has been outlined, the line man departs from the scene, temporarily.

The instructor, with guidance from the training director, draws up a course outline. This is quite detailed and contains principles in subject matter to be taught, length of training period, size of class and a general plan of presentation. This outline, along with a recommendation for the time and place of the instruction, is returned to the line supervisor for his final approval, after which the package is handed back to the trainer.

The trainer takes the outline and prepares for presentation of material. This preparation includes formulation of lesson plans, drafting and preparation of aids, procurement of films, rehearsals and any other steps that will prepare him to present the material as effectively as he is able. The time and effort spent at this stage will pay off many times in the presentation.

The presentation's importance cannot be overemphasized. The trainer must accept the complete responsibility for its success. Failure of an assistant, mal-

Force COLUMBIA

eases tired eyes ...cuts errors!

This automatic numbering machine prints big 3/8" high figures on filing jackets, time cards, job envelopes, drawings, etc. Saves eyesight of young and old alike and reduces errors, too! 6 or 7-wheel capacity . . . consecutive, duplicate, repeat action.

3/8" DEEP CUT NUMBERS

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Brooklyn 8, N. Y.

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Perfectly Aimed...

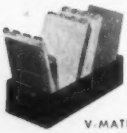
P.E.C. 'MATIC' POSTING EQUIPMENT

hits the mark in office efficiency

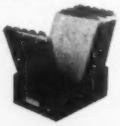
P.E.C. keeps pace with modern office procedures

DUO-MATIC POSTING TRAYS AND STANDS

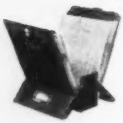
PORTA-MATIC POSTING TRAYS AND STANDS



TILT-O-MATIC TRAYS (For Register Forms)



V-MATIC TRAYS (Small Capacity Containers)



HANDI-MATIC TRAYS (For writing board and machine accounting records requiring small capacity containers.)

EXPANDI-MATIC (Designed for installations where space is at a premium.)

Write today for complete catalog

P.E.C. M-L ASSOCIATES

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For More Information Circle No. 370

function of a visual aid, or any other misadventure at this point cannot be discounted by offering excuses. The instructor must maintain control of the class and establish an atmosphere that invites questions and inspires confidence. His perseverance, personality and patience will be tried many times. His enthusiasm must be always at a high point. He must be helpful, congenial and understanding. He must understand and use the principles of motivation, the techniques of a forceful presentation, and the laws of learning and retention. An unskilled, uninspired instructor can kill a training program at this stage. A forceful, enthusiastic, skillful presentation will carry the program along successfully to the final stage of evaluation and follow-up.

While the application of the training on the job is the responsibility of the line supervisor, the trainer has a very serious responsibility in this area. He must work closely with the supervisor to determine:

How the course should be changed to better fulfill the needs of the trainee.

How the instruction should be changed to make it more readily applicable to the job.

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How this training has improved the production of the trainee and by what percentage.

Always keep in mind the motto of training in industry: *It must fulfill a definite need.*

The instructor is given the subject matter and the personnel to transmit this subject matter to. He must remember the three basics of teaching: tell them, show them, have them perform. His course will include the following steps:

1. Introduction

A good introduction which includes a statement of the subject, course content, and motivation for the student.

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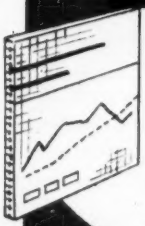

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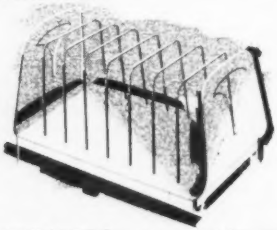

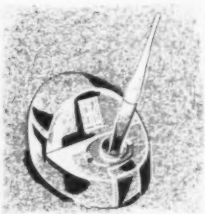

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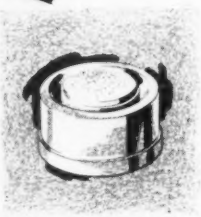

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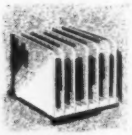

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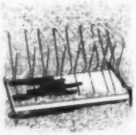

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This last is of the most importance. The student must be made to see how important this training is going to be to him and how he can apply it to his job. The entire success of the instruction will depend on how strongly he has motivated the student. The method of motivation depends upon the subject matter, student level and intelligence, and ability and ingenuity of the instructor.

2. Explanation

The explanation is often the major portion of the lesson and the part where the new material is presented. This is done by lecture or conference or a combination of both using appropriate visual aids. The instructor uses the proper presentation techniques to hold the attention that he caught with the motivation part of the introduction.

3. Demonstration

Then the instructor demonstrates what he talked about in his explanation. If he is teaching a manual skill, either he or an assistant performs the action. Often the instructor will be hard put to come up with a demonstration in other than skill lessons. However, he should remember that showing is important and should demonstrate as much as possible. In some cases the demonstration is done concurrently with the explanation.

4. Application

Next comes the application and the trainee practices what he has been told and shown. More actual learning is accomplished here than at any other step,

because people learn most by doing. Always plan for an application by the student.

5. Examination

The fifth step is the examination. Contrary to common belief, the primary value of the examination is not to test the student, but to discover gaps in learning, test the effectiveness of the instruction and, most important, motivate the student. People who know they are going to be tested will work harder, pay closer attention and learn more. The mechanics of testing may vary. Frequently you test the student while he is performing in the application stage. You may test by oral questioning or you may test with written questions depending upon the subject matter and the student level, but some manner of examination must be employed.

6. Summary

In the summary, the instructor goes over the high points, asks for questions and restates the objective telling the student why this is important to him and how he will apply it to his job.

The above paragraphs outline the mechanics and principles of good instruction. The application of these principles and mechanics are the key to the success of a training program which is entirely dependent on one man, the instructor, who keeps in mind at all times the fact that training in industry must fill a need and therefore must be applied to the job. After the training has been accomplished, the responsibility for the application of the training on the job rests directly with the line supervisor.

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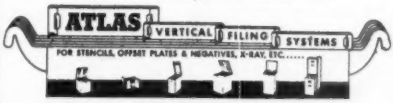

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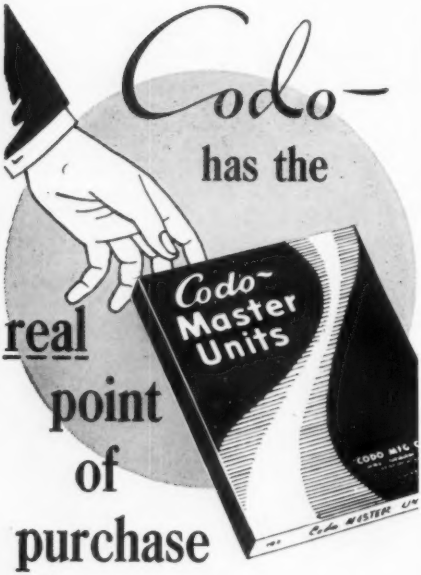

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Leasing Plans Aid Office Mechanization

ELECTRIC TYPEWRITERS, accounting machines, automatic copying equipment, special filing systems and electronic computers have increased the cost of equipping even a modest-size office and any expansion, modernization or change may involve a larger capital outlay than anticipated. The answer for many companies lies in leasing, rather than owning, their office equipment, according to G. F. Walters, chairman of Acme Associates, Inc., Chicago, a leasing company which has been successful in working out leases on single machines and whole offices of equipment.

Although new systems usually result in savings in personnel costs as well as greater management efficiency and accuracy, office managers are sometimes understandably reluctant to tie

"Think you can get along with six computers?"

up lines of credit or deplete working capital. For them, leasing may hold the solution.

"Management must realize," Mr. Walters said, "that even the most modern office equipment does not make profits simply because you own it; your profits result from the use of equipment. Leasing offers all of the profit-making potential of utilization without the drawbacks of ownership."

Leasing plans can be drawn up to cover as little as one machine or an entire office full of the latest automated machines, plus the desks, filing cabinets, movable partitions and even wastebaskets which go with the machines. Lease agreements are often open-end, permitting addition of other items as they are needed. Mr. Walters emphasized that leasing is not a substitute for adequate working capital or ability to borrow, but rather a financial tool enabling the executive to make the best possible use of his assets.

A veteran of 40 years in manufacturing, selling and management, Mr. Walters predicts that leasing companies will soon become "basic working partners of the modern executive, like banks and accounting firms." A brochure, "Leasing Releases Working Capital," is offered without charge by Acme Associates, Inc., 321 Palmolive Building, Chicago 11, Ill., or **Circle No. 102.**

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For More Information Circle No. 362

News of the Office

NMAA Executive Director

R. C. Elliott

R. Calvin Elliott was appointed executive director of the National Machine Accountants Assn. Formerly vice president and treasurer of Business Efficiency Aids, Mr. Elliott will be responsible for coordination of all NMAA national programs covering education, chapter activities, national and local conferences and seminars. He will also be responsible for the administration of NMAA's national headquarters in a recently completed building in Mt. Prospect, Ill. The association now has 149 chapters and 13,150 members.

Reproduction Engineers Elect

A. J. Prioletta

At a recent meeting in Pittsburgh the Society of Reproduction Engineers elected Albert J. Prioletta, Port of New York Authority, as president for the 1960-61 term. George F. Weidman, Goodyear Aircraft Corp., Everett Kaestner, Bell Telephone Laboratories, and Frank E. Golightly, Westinghouse Electric Co., were all named as vice presidents. William J. Burdick, U.S. Naval Ordnance, was appointed to a second term as secretary; R. H. DeRosa, Ford Motor Co., as treasurer.

NOMA Elects Hodges

R. B. Hodges

R. B. Hodges, Dennison Mfg. Co., was named president of the National Office Management Assn. at the 41st International Conference and Office Exposition in Montreal. Mr. Hodges has been an active NOMA member since 1942, a past president of the Boston Chapter, and a past national director of Area No. 1.

AMA Name Change

American Management Assn. reports that it is changing the name of its Office Management Div. to the Administrative Services Div. It says the reason is that in recent years administrative operations have assumed increasing importance in the overall management of business organizations.

MICR System in New York

The first NCR electronic check-handling system in New York was placed in operation at the Chemical Bank New York Trust Co., fourth largest in the country. This equipment sorts the checks, posts them to the customer's account, prepares his monthly statement, and turns out a record for the bank—all electronically. The system includes an electronic sorting unit developed by Pitney-Bowes, Inc. and National Cash Register Co., that can sort 5500 magnetically encoded checks an hour.

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Einhorn to Head FGAA

Raymond Einhorn

Raymond Einhorn was elected national president of the Federal Government Accountants Assn. at its ninth annual symposium. Mr. Einhorn is director of audits, National Aeronautics & Space Administration. Since 1942 he has specialized in cost accounting, auditing and financial management policy in such federal agencies as the Office of Price Administration, Reconstruction Finance Corp., Atomic Energy Commission, Economic Cooperation Administration, and General Accounting Office.

Computer Exhibit in N.Y.

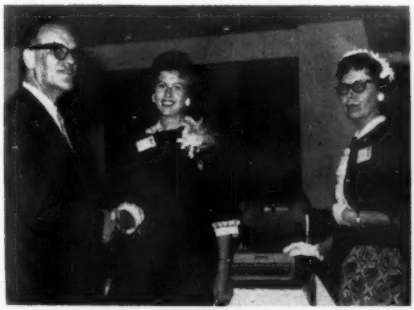
In cooperative display, five manufacturers of electronic data processing systems will exhibit nearly $2 million in equipment at the National Business Show in the New York Coliseum, Oct. 24-28. The probable line-up of equipment will be: Bendix G-15 general purpose digital computer and accessory equipment; Control Data Corp. Model 160 Computer and Model 180 Data Collector; Philco S-2000 general purpose electronic data processing equipment; RCA 501 electronic data processing equipment, and Remington Rand Univac 90. The CompuCenter exhibit will occupy 8000 sq. ft.

Executive Job Outlook

Some 64% of companies replying to a recent American Management Assn. survey say they will be forced to recruit key executives from the outside within the next two years. An additional 35% believe there is a 50-50 chance of their doing so. According to the survey, general management executives will be in greatest demand, followed by marketing, manufacturing, and research executives, in that order. The survey notes a slackening in the demand for engineering executives, and an increase for research men. It also reports that about 75% of the executives needed will be recruited through business contacts. The other popular methods of recruitments are: executive search consultants; associations and professional societies; and advertising. At the bottom of the scale is answering "position wanted" insertions.

Computer School to Open

IBM Systems Research Institute, to be set up on United Nations Plaza, New York, was announced by Thomas J. Watson Jr., IBM president. Mr. Watson, in an address before over 600 members of GUIDE (an international organization of business computer users), said that it is necessary to increase sharply the new class of computer professionals in the U. S. The new institute he described as a major education effort in this regard. Under the direction of IBM vice president John C. McPherson, the computer school is expected to have an annual budget of some $2 million. The first group of 30 students will be enrolled this fall. Eventually IBM expects to train up to 400 a year.



Shirley Iley and her teacher, Ruth Wright of Gonzales, Texas, who won an all-expense paid trip to Sweden in the Facit Accuracy Contest in Typing, a national contest sponsored by Facit, Inc. Karl Siewert, president, is seen congratulating Miss Iley.

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The Live Corpse

(Continued from page 31)

of the reasons given earlier, he will, if he feels such action warranted, assign a local company inspector to the case. In assigning the "Case of the Live Corpse" to K. G. Emmert in Boston, claims specialist William Avy closed his initial memorandum to Mr. Emmert with these prophetic words, ". . . and don't overlook the fantastic possibility that this might be a case of voluntary disappearance."

Briefly, this is what happened. A 37-year-old president of a small Massachusettes construction company apparently fell from his yacht and drowned while sailing with two friends. Neither of his companions actually saw him drown, they simply reported seeing him momentarily in the water before he was swept away into the mist by the current. The local police apparently accepted the occurrence as one of accidental drowning and, as such, it was reported in the local newspapers.

A short while later, the widow put in a claim for the $50,000 death benefit under her husband's policy, plus a further $50,000 payable under the policy's double indemnity clause in the event of accidental death.

Not only was the policy new, just a month in force, it involved double indemnity and a missing body. On the surface everything seemed aboveboard. The local newspapers seemed satisfied that the event was nothing more than the tragic accident it seemed, as did the local police and the man's relatives. The first hint of anything wrong came in the form of Mr. Avy's outlandish

prediction. Yet, that's exactly what it turned out to be—a case of voluntary disappearance. Assisted by the police Mr. Emmert quickly found out that:

- Reputedly a wealthy man, the insured was actually heavily in debt.
- Though married, he was involved with another woman.
- Prior to the man's disappearance, this woman emptied her apartment of furniture, piece by piece, all under cover of darkness.
- The two "friends" turned out to be employees of the insured to whom he owed substantial sums of money.
- Both men had police records.
- The insured was a particularly strong swimmer.
- He could have left the boat voluntarily at any one of several shore points.
- These were the highlights of the circumstances the police and the insurance inspector uncovered in a thorough investigation. Some six weeks later, on a quiet street in Houston, Texas, the so-called "live corpse" was arrested while coming from a local movie with the other woman.

William Avy, MONY claims specialist, checks the news account of a disaster.

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Effective Use of Ideas

(Continued from page 111)

ideas. Job analysis is the vehicle whereby basic data which affect performance (such as working conditions, activities, forms, machines, time spent on various operations, and incumbent's specifications) are recorded and used in job evaluation as well as work distribution, analysis and training. The author has successfully used a job analysis form which investigates the opinions of employees as associated with methods of performance. Questions such as the following were asked:

Are any unusually difficult operations involved?

Do you have any suggestions for improving or simplifying your work?

Are there any phases of your activities of which the purpose is not clear?

Are your activities being obstructed in any way by inadequate or incomplete instructions?

Do you find it necessary to correct errors in work which comes to you to be processed?

In your opinion, do you have the proper tools and equipment for your work?

This adds no complications to the job analysis study and provides an opportunity for employees who have ideas to express them, giving management the benefit of their personal observations. The author's experience that only 10% to 15% of the employees respond to these questions does not reduce the value of including the questions on the job analysis form. There are so few opportunities for employees to take

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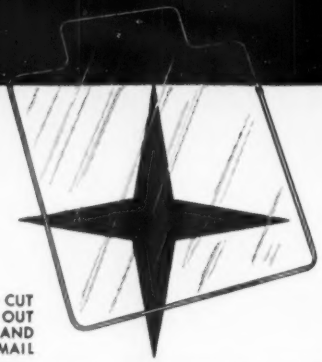

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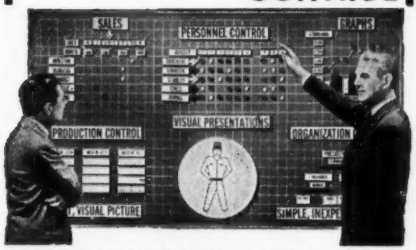

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  1 gross tapes...$17.00 per doz., ppd.

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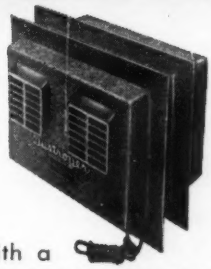

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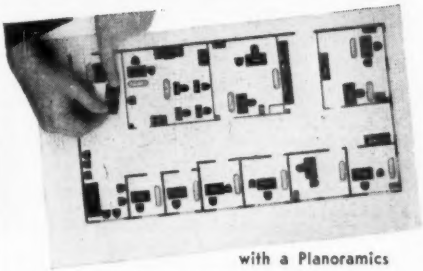

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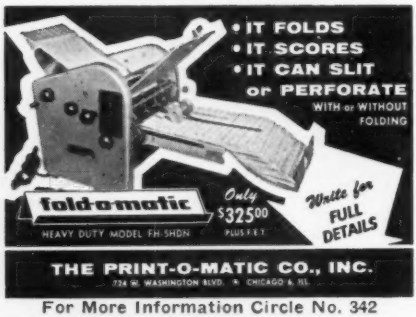

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part in the various investigations and surveys of business methods, particularly of the methods that affect their own activities, that no opportunity should be passed up.

3. *Centralize responsibility for evaluating suggestions.* The author is an enthusiastic exponent of formal suggestion plans; however, for the purpose of this discussion only the informal and normal type of employee contact is covered. When evaluation and acceptance of an idea is left to department managers, human resistance to change may prevent ideas getting further exploration by top management. Inertia, the desire to perpetuate present methods, and plagiarism may discourage the development of ideas by employees. Often the supervisor's thinking is more retrospective than progressive.

Centralizing responsibility for practical evaluation of ideas, regardless of the level from which the idea originates, creates a psychological atmosphere that reflects management's awareness of the possibility for improvement. It also screens out impractical ideas that spring more from enthusiasm than completeness of coverage. When ideas are screened and evaluated, and top management is informed of those that have merit but require policy approval, the person who made the suggestion should be told the results. "We have tried that and it won't work," or "We have been doing it this way for 25 years," are not adequate explanations for rejecting an idea.

Before management attempts any program that has as its objective the creation of suggestions, self-analysis of methods or development of a more en-

thusiastic approach to job performance, it should recognize that the comparatively peaceful existence which attends the arbitrary handling of methods will be shattered, and that intelligent explanation will have to be given to the questions and suggestions which may be engendered. Scientific management deals with the "who, what, where, when, how and why" aspects of the operations. If *only* the "what, when, how and where" are emphasized in job instructions, the "order and obey" technique will probably suffice. Don't bring in the "why" aspect, if there is no disposition to listen to ideas that arise from an objective analysis.

4. *Give employees credit for suggestions.* One cannot expect indefinite rewards as a result of a one-time idea. Too often employees win recognition for an idea which at the moment reflects creative intelligence, but which does not repeat itself. Initiative should be a factor in merit rating. Constructive suggestion is a reflection of initiative. If a record is maintained of the source of suggestions, the employee can win recognition to the full extent of his ability to suggest improvements.

5. *Training improves performance and promotes suggestions.* Training develops skill which increases production. Training also increases job knowledge and understanding of methods. When one understands his job and knows the reason for his activities, this job knowledge may be applied to develop methods. It is useless to criticize that which is not understood. Too much criticism springs from those who are uninformed. Even the expert analyst must first get the facts concerning

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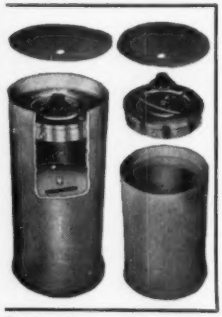

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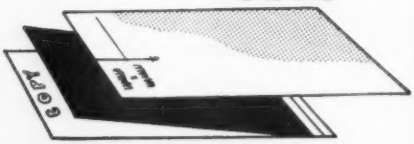

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present methods before he can come up with improvements, notwithstanding that his experience may provide ready answers. Don't expect employees, without the thorough understanding of the objectives of each job, to come up with any practical suggestions. They must be well grounded by training in the "whys and wherefores" of present activities.

6. *Contests help develop ideas.* A utility company staged a "why" contest in which, for one month, they offered a modest daily cash prize for the best question concerning why things are done as they are. This was a successful, informal plan whereby employees were invited to question their jobs. Employees were not expected to know the answers. The questions were passed to the methods department for appraisal and further study to see if an idea for improvement could be developed.

There are executives who are alert to new ideas. They are tuned in to new methods, innovations and approaches which may be different. The experienced executive, regardless of his receptiveness, makes his investigation and checks his facts before he applies the new ideas. Thus, changes are usually progressive and do not throw the organization into a state of confusion which inevitably results from frequent and ill-considered methods changes. Unfortunately, many believe that the best defense against change is the categorical "no" which protects the executive, at least until his competitors' advancements blast him out of his rut (or his job).

(Next month Mr. Wylie will discuss Effective Organization Development.)

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News of the Industry

Cormac Buys General Photo

Acquisition of General Photo Products Co., manufacturer of photocopy equipment and supplies, was announced by Botho Lilienthal, chairman, Cormac Photocopy Corp. The New Jersey firm will become a wholly-owned subsidiary of Cormac, which acquires the product development of the Electrofax process that General Photo had carried out to prototype stages under license agreements with Radio Corp. of America and Haloid Xerox Inc.

NCR to Expand Division

National Cash Register Co.'s Electronics Div. will double its facilities at Hawthorne, Calif., by the end of the year, reports D. E. Eckdahl, division manager. Erection of the addition will enlarge the total area to over 100,000 sq. ft. Included in the addition will be a large area devoted to pilot assembly of various new computer systems. The data processing center here will serve the Los Angeles area and utilize the NCR 304 transistorized computer.

Verifax Distributorship

Kee Lox Mfg. Co., Rochester, N. Y., has extended its present Verifax distributorship to 30 branches, according to Raymond V. Mahon, manager, Verifax Div. Mr. Mahon reports his division is setting up a complete sales and service organization in key cities throughout the country, which will also stock developer, paper, parts, etc.

Baltimore Business Forms

Baltimore Business Forms, Inc., is now the official corporate name of the Baltimore forms manufacturing concern that began in 1916 as the Mutual Manifold Co., and operated since 1922 as Baltimore Salesbook Co. The official change in name was announced by Talbot T. Speer, chairman.

Old Town Appointments

J. H. McGraw III

Several executive appointments were announced at the recent annual meeting of the directors of Old Town Corp. James H. McGraw III was reelected vice president and elected treasurer and chairman of the executive committee. He formerly was vice president and secretary. Replacing Mr. McGraw as secretary is Robert A. McDowell, a member of the law firm Sullivan & Cromwell. James H. McGraw Jr., maintains his position as chairman of the board and Philip A. Batchker was reelected president.

Parker Chairman Retires

Kenneth Parker, chairman, Parker Pen Co., is retiring from the firm after 40 years. Chief executive responsibility is to be assumed by Bruce M. Jeffris, president. Mr. Parker first headed the company in 1933, following his father, George S. Parker, who founded the firm in 1888.

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SPEC Opens N.Y. Office

Sales Promotions Essentials Corp., an organization that distributes the products of a group of specialized manufacturers in the sales promotion field, has opened an office in New York at 135 East 39th St. "A complete line of sales promotion essentials—including products of National Blank Book Co., Stebco Tufide Business Cases, Plastic Binding Corp.—will be on display," according to SPEC president T. R. Smith. In charge of the office will be Edwin S. Long, regional sales manager.

Columbia Research Agreement

Columbia Ribbon & Carbon Mfg. Co. has renewed its agreement for the sixth year with Adelphi College Research Center, Mineola, N. Y., to study the duplication processes. Areas of research undertaken by the center in cooperation with Columbia's own research department include spirit hectograph processes, thermographic paper and self-duplicating paper.

Electrowriter Sales Manager

J. G. Johnson

James G. Johnson was appointed general sales manager of Electrowriter System Sales, according to J. A. Schram, president, Comptometer Corp. Mr. Johnson was formerly assistant sales manager of Comptometer's Business Machines Div. In his new post he will be responsible for a national sales and advertising program for Electrowriter Systems. He became a Comptometer sales representative for calculating machines in 1946, was named midwest regional sales manager in 1955 and in 1957 become asst. sales manager of the Business Machines Div.

Remington Rand Ad Manager

J. L. Morgan

Joseph L. Morgan was selected for the newly created position of advertising and promotion manager of the Remington Rand Systems Div., Sperry Rand Corp. He was formerly director of advertising and sales training for General Fireproofing Co. In his new post he will be responsible for all advertising and promotional activities for this new advertising division, one of five such recently formed. Previously the company's total advertising and promotional activity was centralized.

Business Equipment Show

The Business Equipment Exposition is scheduled for Nov. 1-4 in Los Angeles' new Memorial Sports Arena, reports Office Equipment Manufacturers Exhibits, Inc. The Pacific Coast presentation is the second in a continuing series of major expositions designed as comprehensive demonstrations of the latest systems and products of the $4.25 billion office machines and equipment industry. Some 60 manufacturers of office, computing and accounting machines, equipment and related supplies are expected to be represented at the show, occupying the entire main floor of the building. For complimentary invitations and complete details write Office Equipment Manufacturers Exhibits, Inc., 777 14th St., N. W., Washington 5, D. C.

Azograph Sales Manager

William F. Souders was named sales manager-Azograph-spirit products, A. B. Dick Co., reports Alexander St. John, general sales manager. Mr. Souders was previously staff assistant to the general sales manager and a national accounts representative. In addition, Kenneth B.

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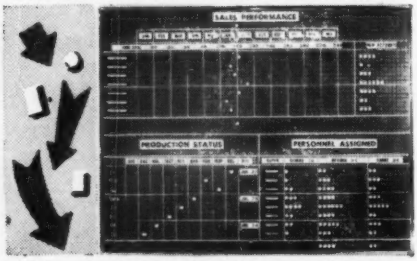

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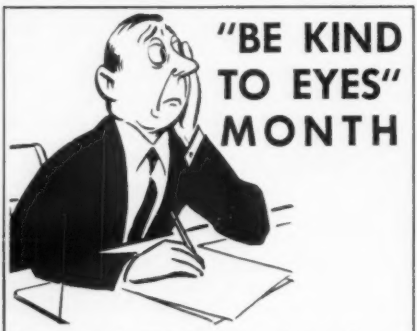

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For More Information Circle No. 267

Marble, A. B. Dick's sales promotion and ad manager, reports the appointment of William C. Bishop as sales promotion manager-international. Mr. Bishop will be responsible for development, execution and coordination of all A. B. Dick promotion activities abroad.

Burroughs' Swiss Company

E. G. Wallace

Formation of a company in Switzerland is spearheading burgeoning operations in Western Europe by Burroughs Corp., reports Ray R. Eppert, Burroughs president. The new firm, named Burroughs International, S.A., will have headquarters in Fribourg, Switzerland. E. G. Wallace, general sales manager for the firm's International Div. since 1954, was named president and managing director. Mr. Eppert said that he expects Burroughs' business in Western Europe will, by 1970, top all its current international business.

Ames Supply Appointment

A. H. Ames

Arthur H. Ames was elected vice president - sales and advertising of Ames Supply Co. Mr. Ames has served as sales manager of the firm's Chicago office since 1959. Prior to that time he was manager of the Detroit office. He has been with the company since 1951. Mr. Ames is filling the position held by E. W. Staats for the past eight years, who, after 27 years with Ames, is retiring. Mr. Ames background in serving office machine dealers makes him well qualified to succeed Mr. Staats.

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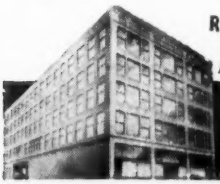

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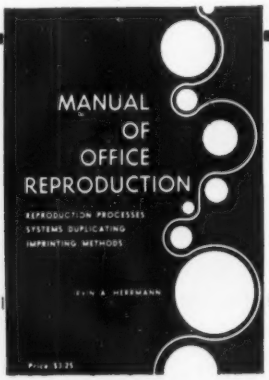

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Evans Acquires Richie

Evans Specialty Co., Richmond, Va., has acquired the interests of W. H. Richie Co., Philadelphia, makers of the Richie cushion for business machines. Evans will market the cushion under the trade name Sorba-Sound.

Regna District Manager

John L. Jackson was made district manager for Regna cash registers, adding machines and Joeli safes in Ala., Fla., and Ga., reports Knut Borge, general manager, Regna Cash Registers, Inc. Mr. Jackson has been associated with the office machine industry for more than 30 years.

NOFA 1961 Convention

The 15th annual convention of National Office Furniture Assn. is set for Feb. 22-26 at the New York Coliseum, reports R. P. Lewis, NOFA president. A survey of former exhibitors indicated a preference for a New York location.

Rapid Roller Technical Head

A. M. Wightman has become technical director of the Rapid Roller Co., according to B. P. Nilles, president. Mr. Wightman has had some 25 years experience in the rubber industry and graphic arts field. He was formerly associated with Dayton Rubber Co. and B. F. Goodrich Chemical Co. He succeeds Philip Schwartz, who is retiring.

Weber Joins Standard Products

William H. Weber has joined Standard Products Corp. as manager of their impression fabric division. He was also elected vice president of Dynamic Process Co. Mr. Weber will handle all research and development for both corporations. Standard Products Corp. has been a supplier to the carbon and ribbon industry for over 54 years. Mr. Weber was formerly impression fabric project engineer at the Research & Development Laboratories, Electric Typewriter Div., International Business Machines Corp., Lexington Ky.

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He also has had many years experience in the textile industry with Reeves Bros.

Akers Heads SMNA

S. R. Akers

Stanley R. Akers was elected president of the Safe Manufacturers National Assn. Mr. Akers is president of Meilink Steel Safe Co., Toledo, Ohio, a position he has held since 1942. He also heads Hercules Tube Co., Flat Rock Mich., and previously served as president of SMNA in 1955.

Tech Panel Vice President

D. D. Kriebel

Don D. Kriebel was appointed vice president - sales by the board of directors, Tech Panel Co. The move was part of the firm's long-range plan to bring improved service on control panels and wires to tabulating installations throughout the country. Mr. Kriebel has a broad background of experience in data processing gained during his 12 years with IBM in the Akron, Ohio, area. During this time he served in both sales and engineering capacities. He will make his headquarters at Tech Panel's main plant at Kirkwood, N. Y.

To Celebrate 85th Anniversary

The Stationers & Publishers Board of Trade will celebrate the 85th Anniversary of its founding, on Oct. 21 with a reception and dinner at Hotel Biltmore, New York. The festivities will be preceded by afternoon forum discussions on selling, distribution and financial management. Management and sales personnel associated with manufacturers and distributors of stationery, office equipment and allied lines

are invited. Details from Ed Kallmann, 200 Fifth Ave., New York 10.

Philip M. Zenner

Philip M. Zenner, president of Royal McBee Corp., died suddenly June 19 in Port Chester, N. Y. He was 63 years old. Mr. Zenner served as a Navy officer during the first World War and graduated from Yale in 1920. He joined the McBee organization—founded by his father, Henry Zenner—in 1931, and became chairman and president in 1950, a position he held when McBee Co. was merged with Royal Typewriter Co. in 1954. Mr. Zenner was then named president of Royal McBee. He also was a director of Union Hardware Co., C. J. LaRoche & Co., and Royal Precision Corp.

Pencils Grew on Trees

PENCILS have played an important role in the world ever since the uprooting of an oak tree with particles of graphite clinging to its roots gave rise to the idea over two centuries ago. For years pencils were known as *crayons d'Angleterre*, the famous graphite mine at Borrowdale, England, giving that country a virtual monopoly. When the mine was worked out, pencil makers began to consider the possibility of using powdered, instead of slab, graphite. The need was for an effective binder.

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National Conference & Exhibit Calendar

National Office Machine Dealers Assn., Coronado, Calif., July 10-13.

National Secretaries Assn., Hilton Hotel, Pittsburgh, July 20-23.

National Society of Public Accountants, Muehlebach Hotel, Kansas City, Mo., Aug. 22-26.

Assn. for Computing Machinery, Marquette University, Milwaukee, Aug. 23-25.

National Business Forms Associates, Chase Park-Plaza Hotel, St. Louis, Sept. 14-17.

American Society of Women Accountants, Hotel Warwick, Philadelphia, Sept. 22-24.

National Stationery & Office Equipment Assn., Conrad Hilton Hotel, Chicago, Sept. 24-28.

American Institute of Certified Public Accountants, Bellevue-Stratford & Sheridan Hotels, Philadelphia, Sept. 25-28.

National Assn. for Bank Audit, Control & Operation, Statler Hotel, Los Angeles, Oct. 10-12.

Systems & Procedures Assn. of America, Commodore Hotel, New York, Oct. 10-14.

American Records Management Assn., Plankinton House, Milwaukee, Oct. 19-22.

Controllers Institute of America, Fairmont Hotel, San Francisco, Oct. 22-26.

National Institute of Governmental Purchasing, Shoreham Hotel, Washington, D. C., Oct. 23-26.

National Business Show, Coliseum, New York, Oct. 24-28.

Office Equipment Manufacturers Exhibits, Memorial Sports Arena, Los Angeles, Nov. 1-4.

Society of Reproduction Engineers, Sherman Hotel, Chicago, Dec. 3-6.

OFFICE EXHIBITS ABROAD

Life Office Management Assn., Royal York Hotel, Toronto, Canada, Sept. 26-28.

Business Efficiency Exhibition, Olympia, London, Oct. 3-12.

Electronic Computer Exhibition, Olympia, London, Oct. 4-12.

International Office Equipment Exhibit, (S.I.C.O.B.), Paris, Oct. 14-23.

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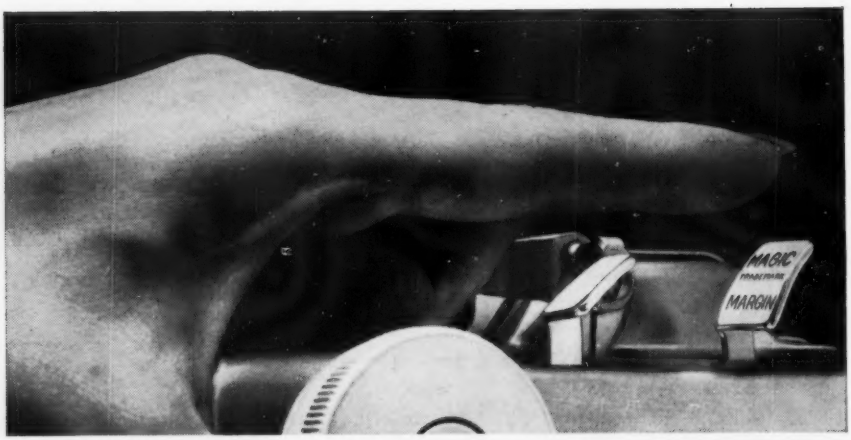

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